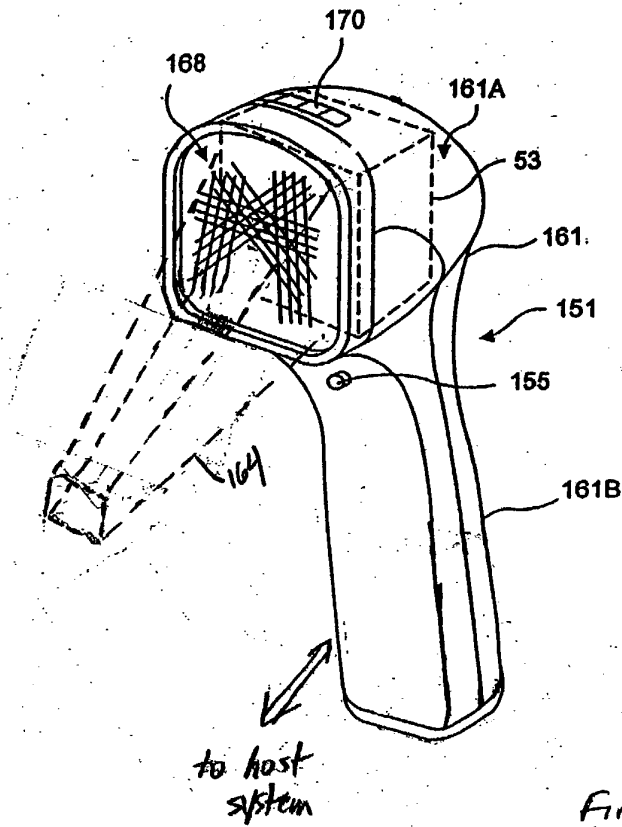


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to host
system

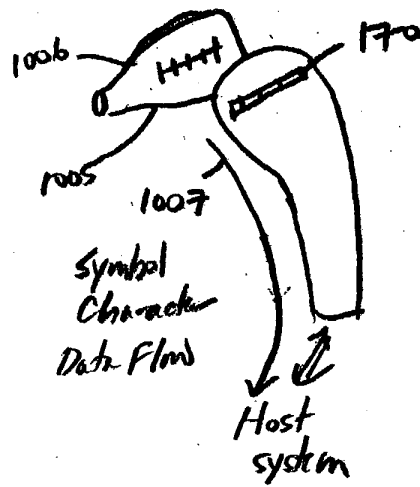
First Generalized
Embodiment

FIG. 1A



FIG. 1B

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OMNI-DIRECTIONAL
Mode

FIG. 2A



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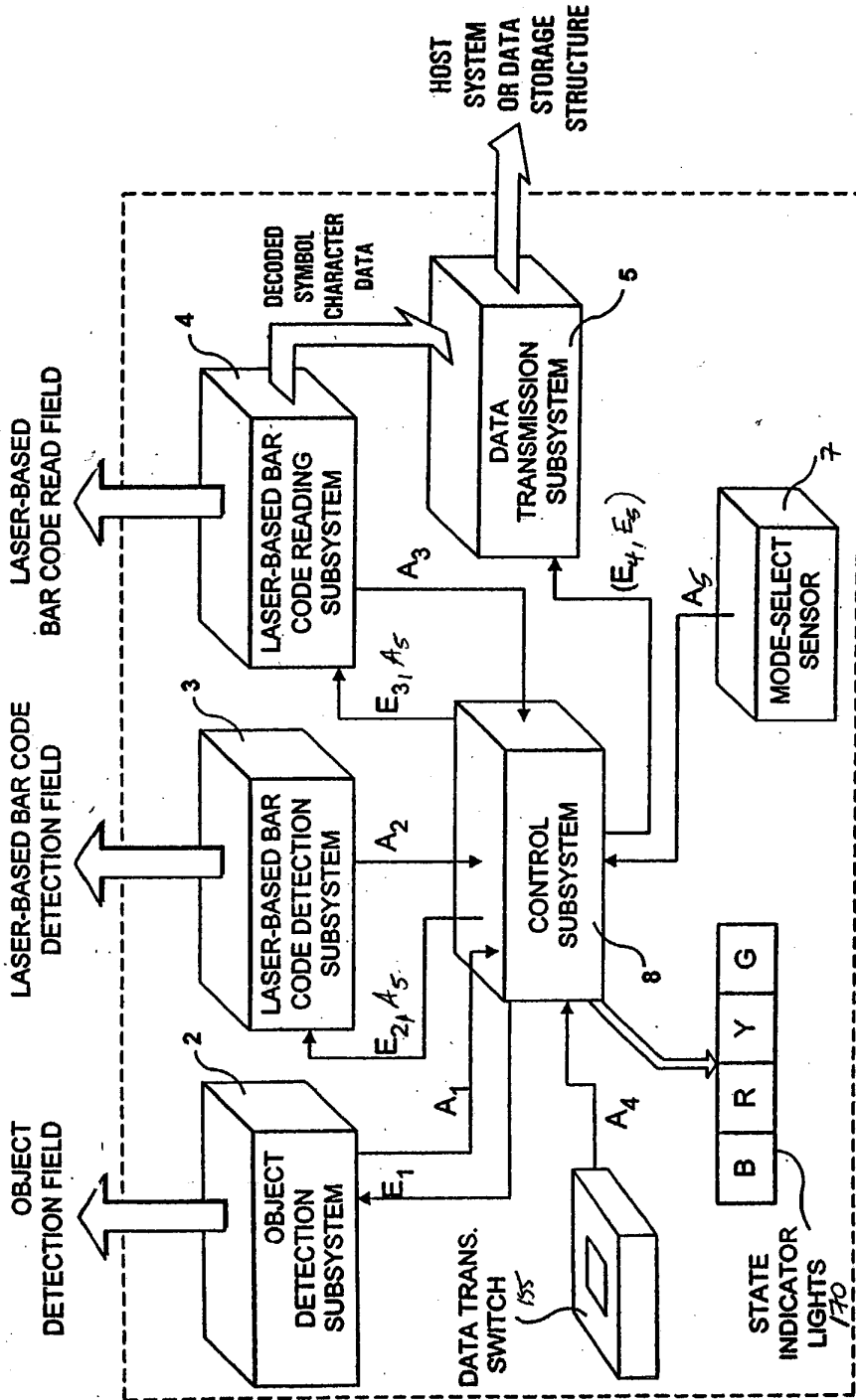


FIG. 3

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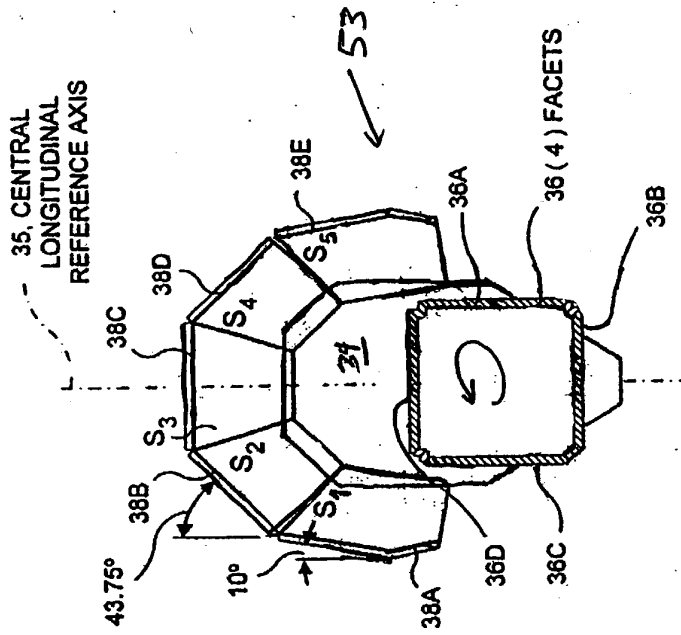


FIG. 4A

	TWIST α	BEND θ
S ₁₋₅	10°	46.0°
S ₂₋₄	43.75°	42.5°
S ₃	90°	40.5°

FIG. 5B

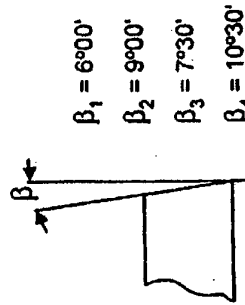


FIG. 5A

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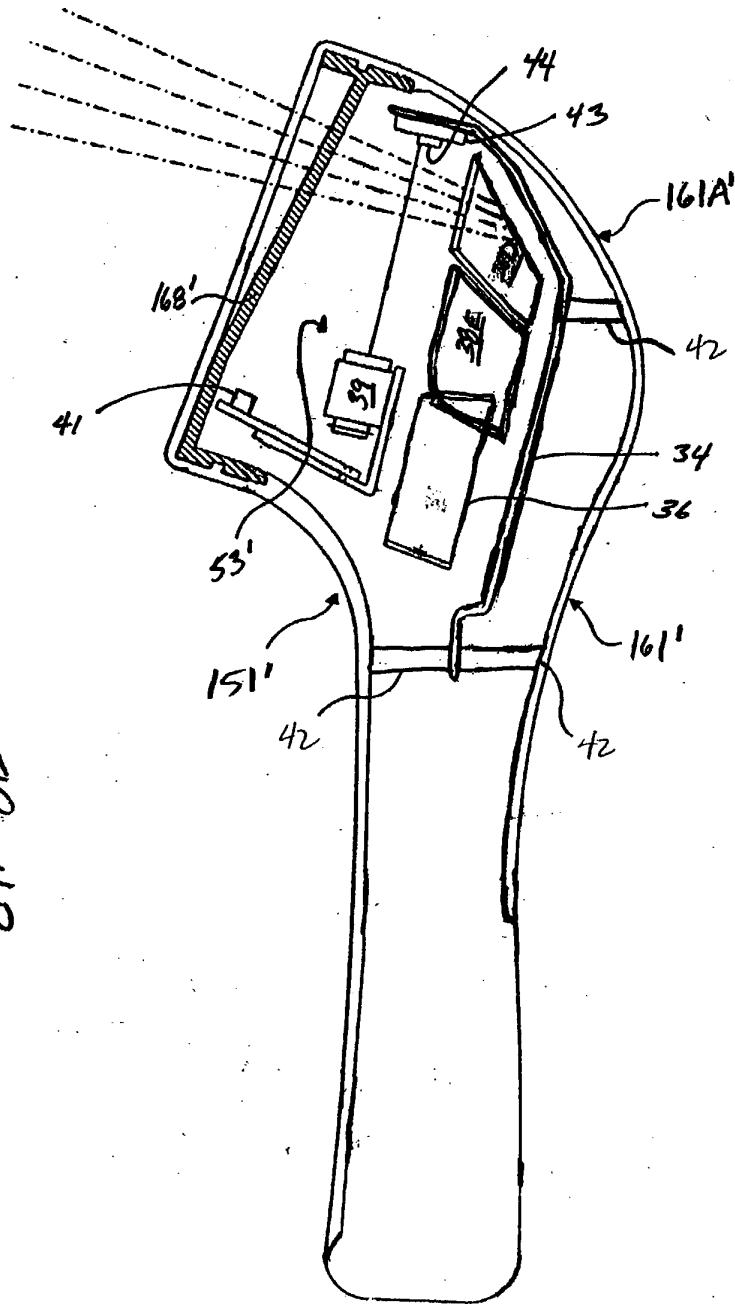
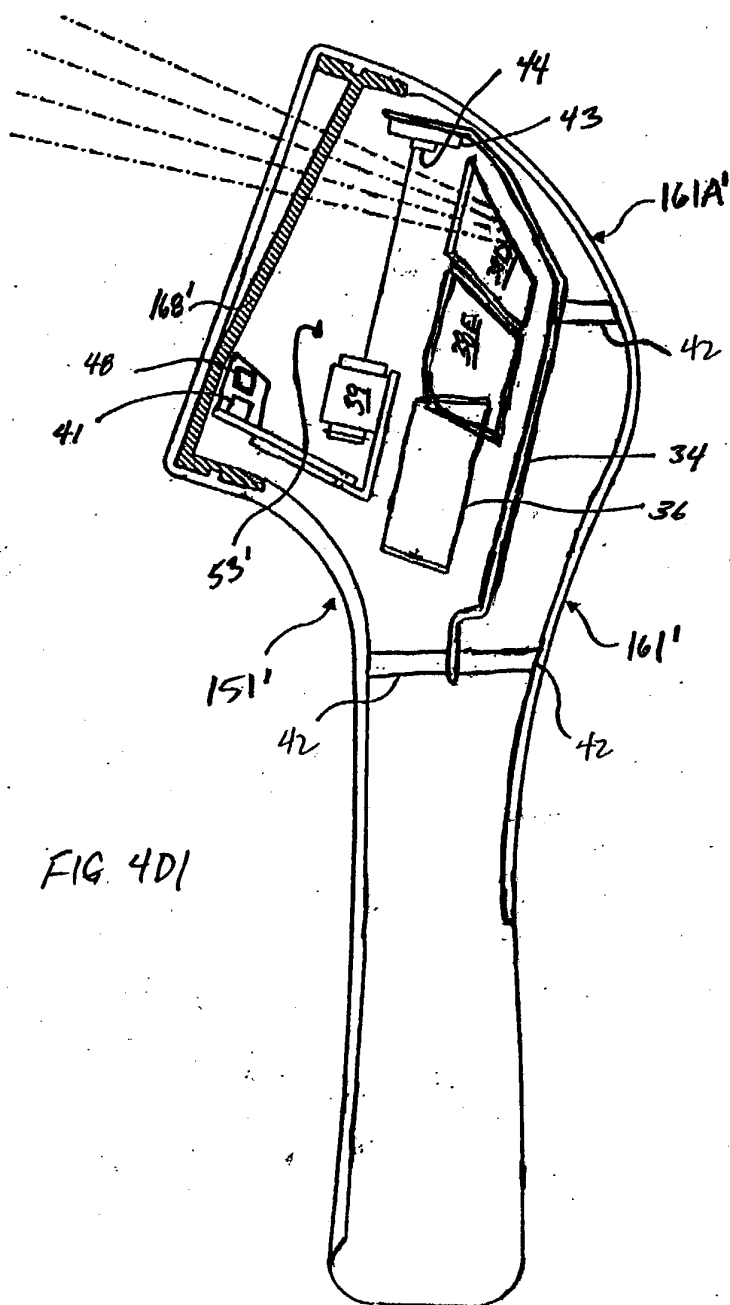


FIG. 4B

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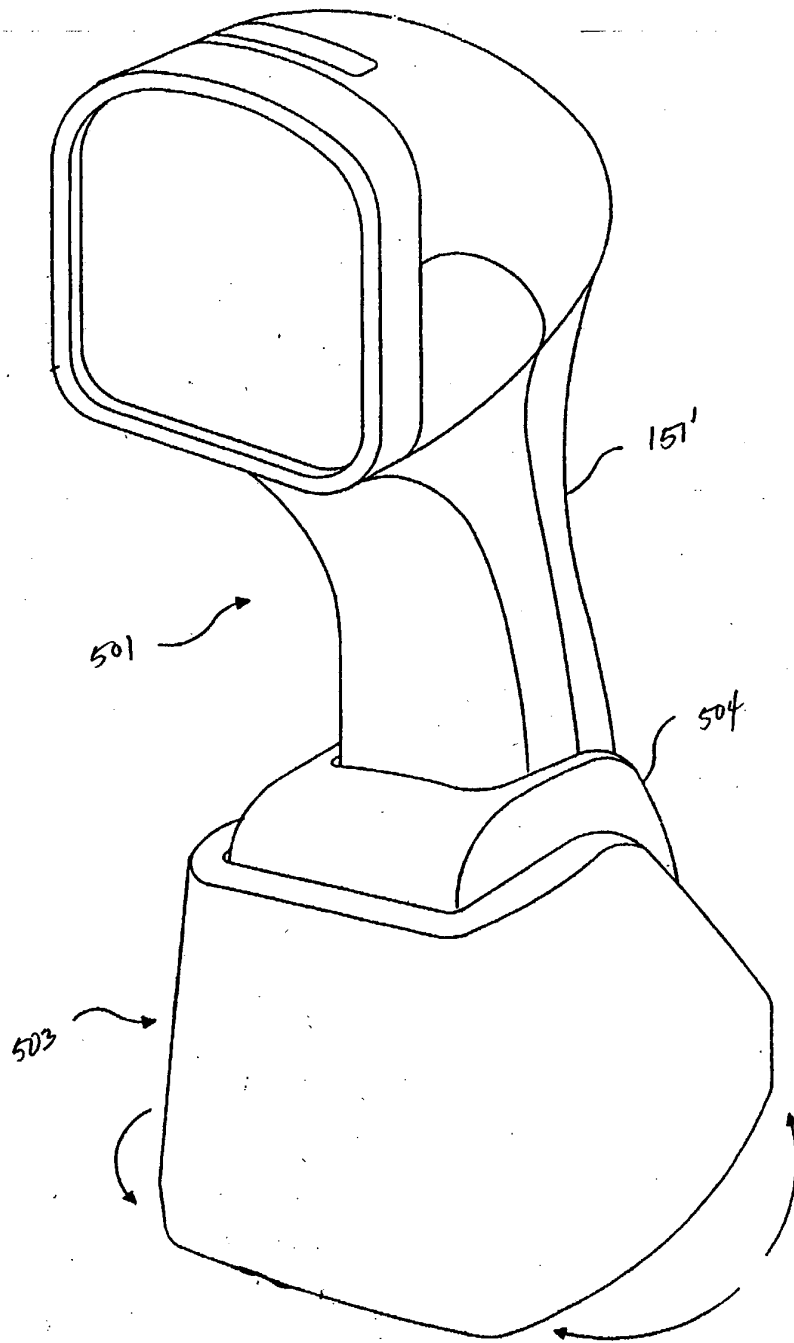


FIG. 5A

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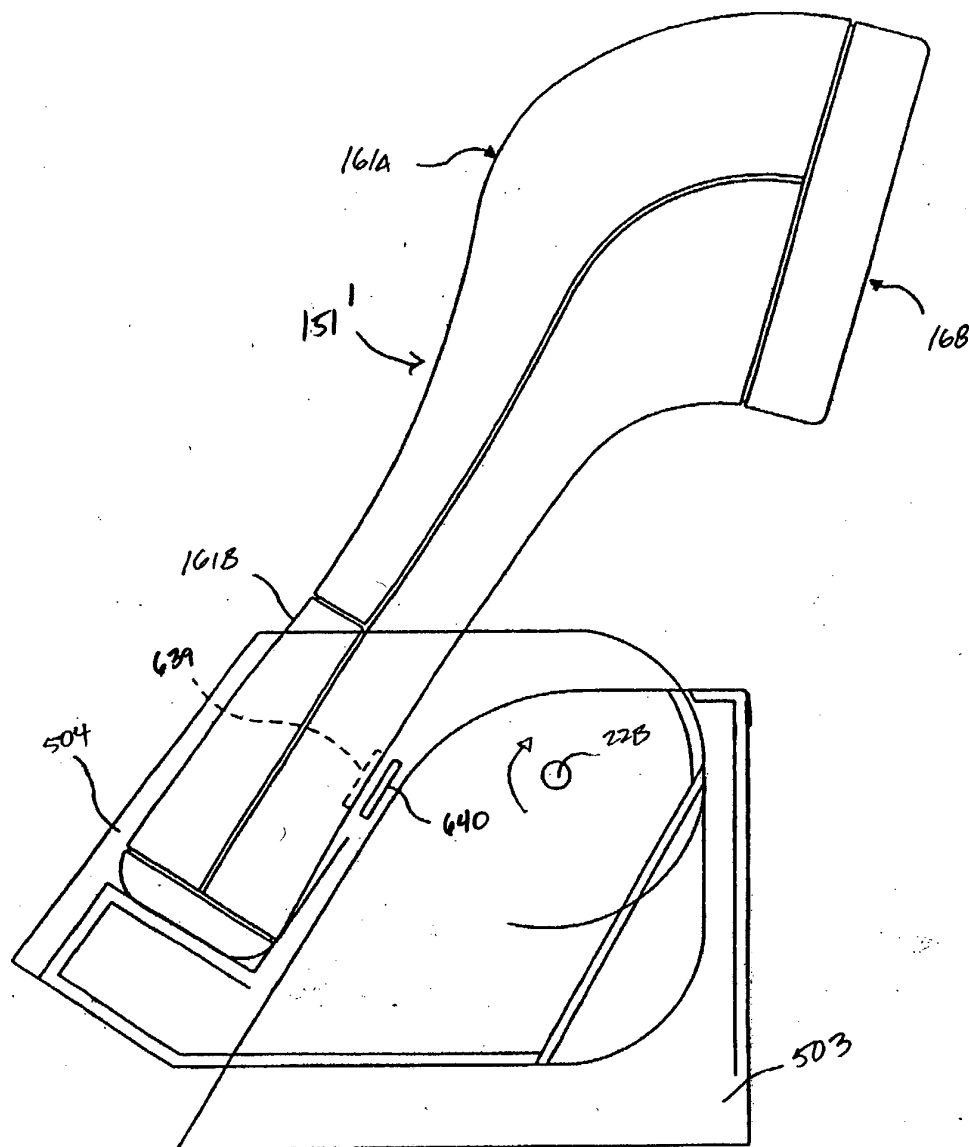
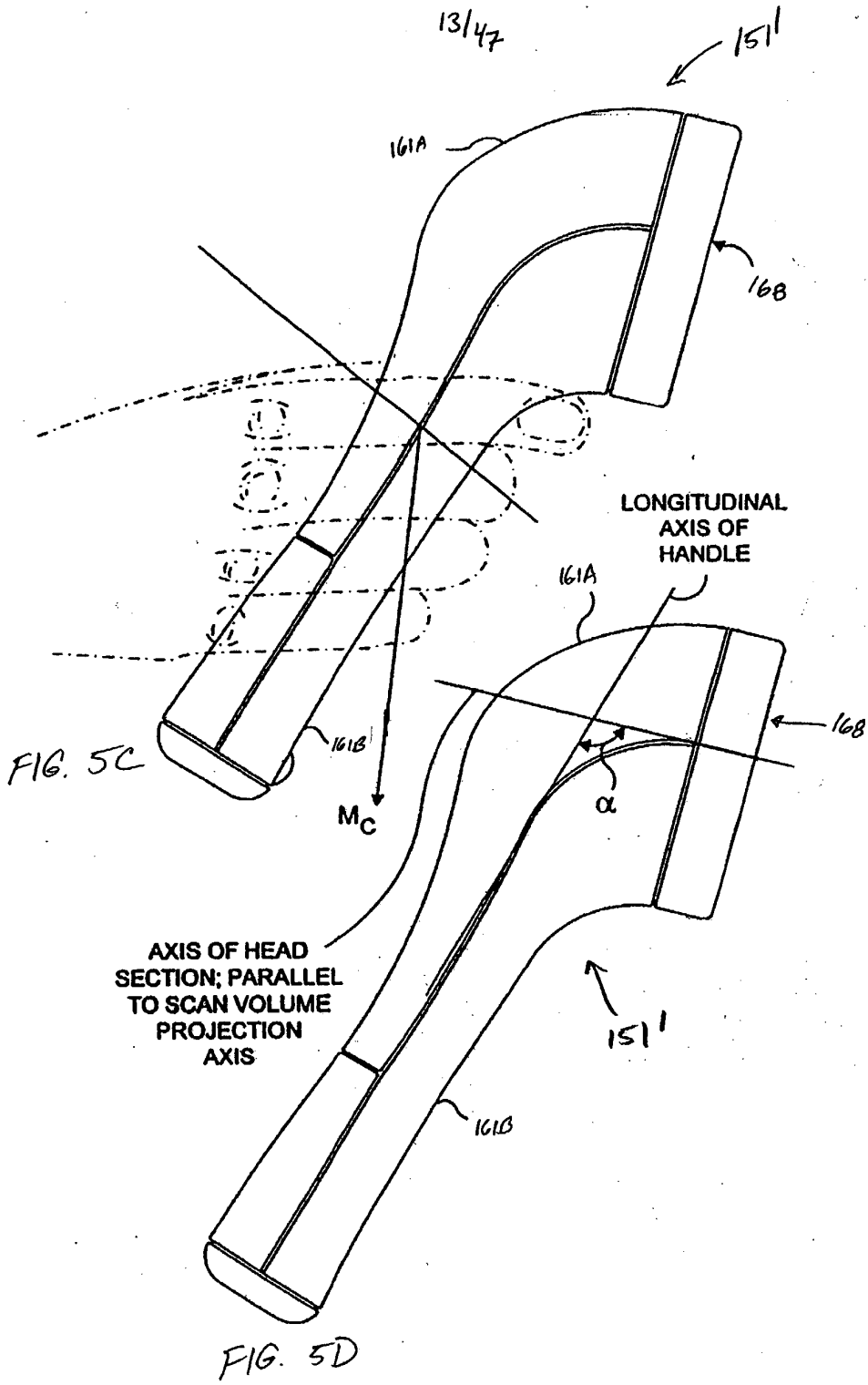


FIG. 5B



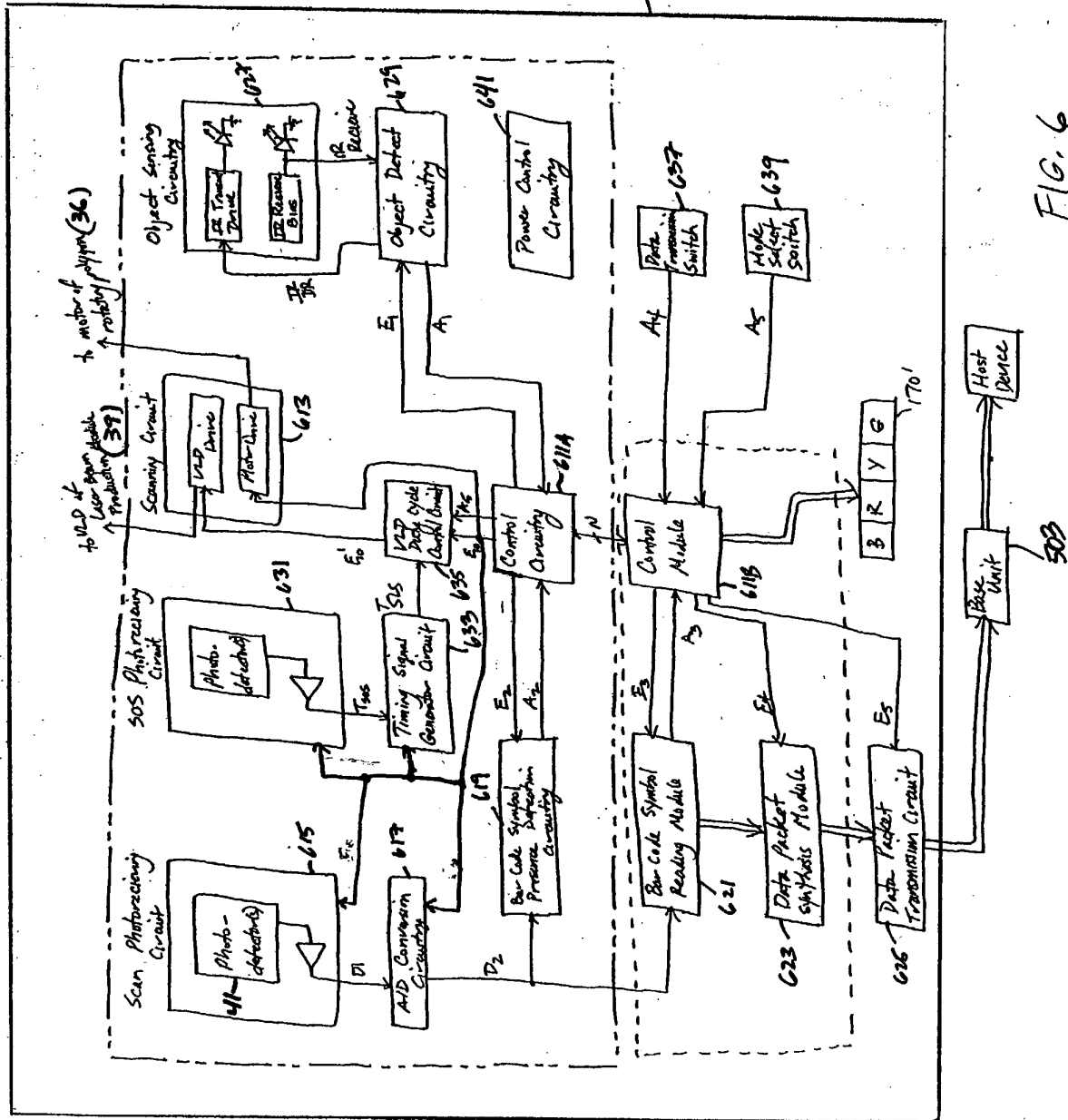


FIG. 6

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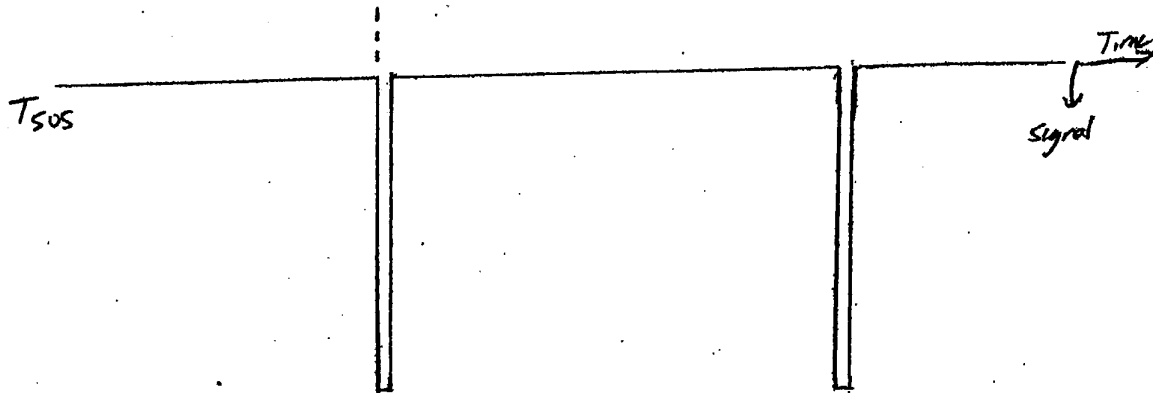


FIG. 7A

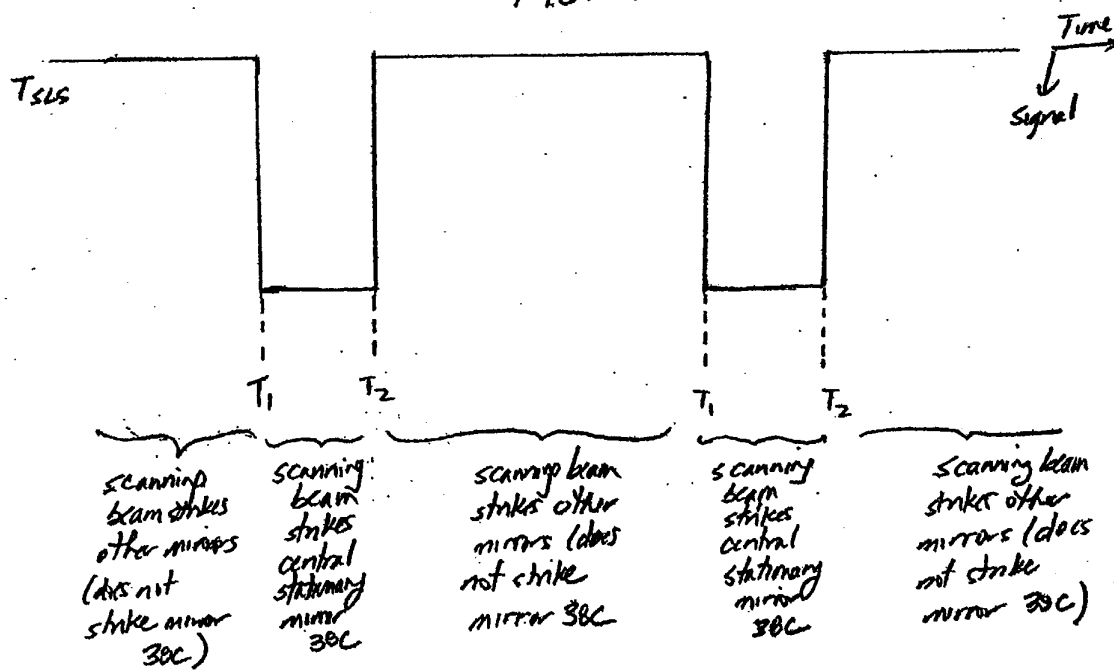
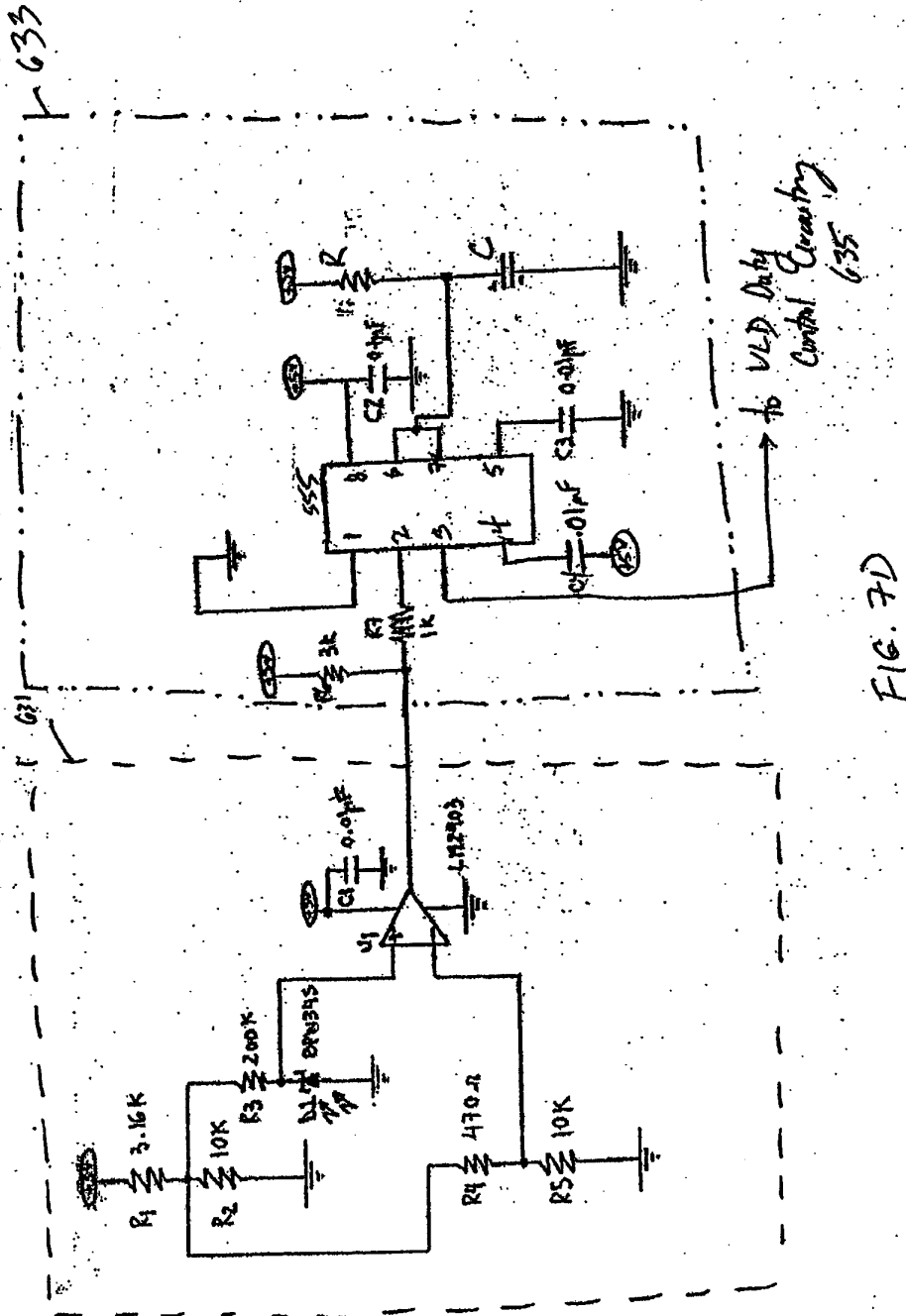


FIG. 7B

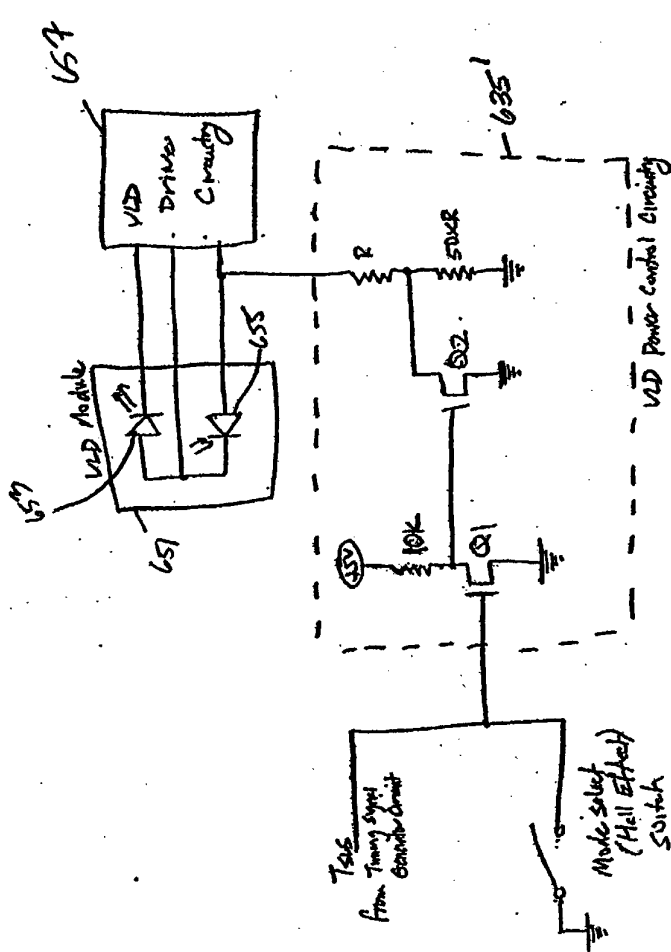
$$E_{10}' = (\overline{T_{SLS}} \cdot E_{10} \cdot A_5) + (E_{10} \cdot \overline{A_5})$$

FIG. 7C

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Mode Select	T455	Q1	Q2	R _{EFF}	PLASER
Open	H	ON	OFF	~51R _{SET}	Low
Open	L	OFF	ON	~R _{SET}	Normal
Closed	X	OFF	ON	~R _{SET}	Normal

FIG. 7E

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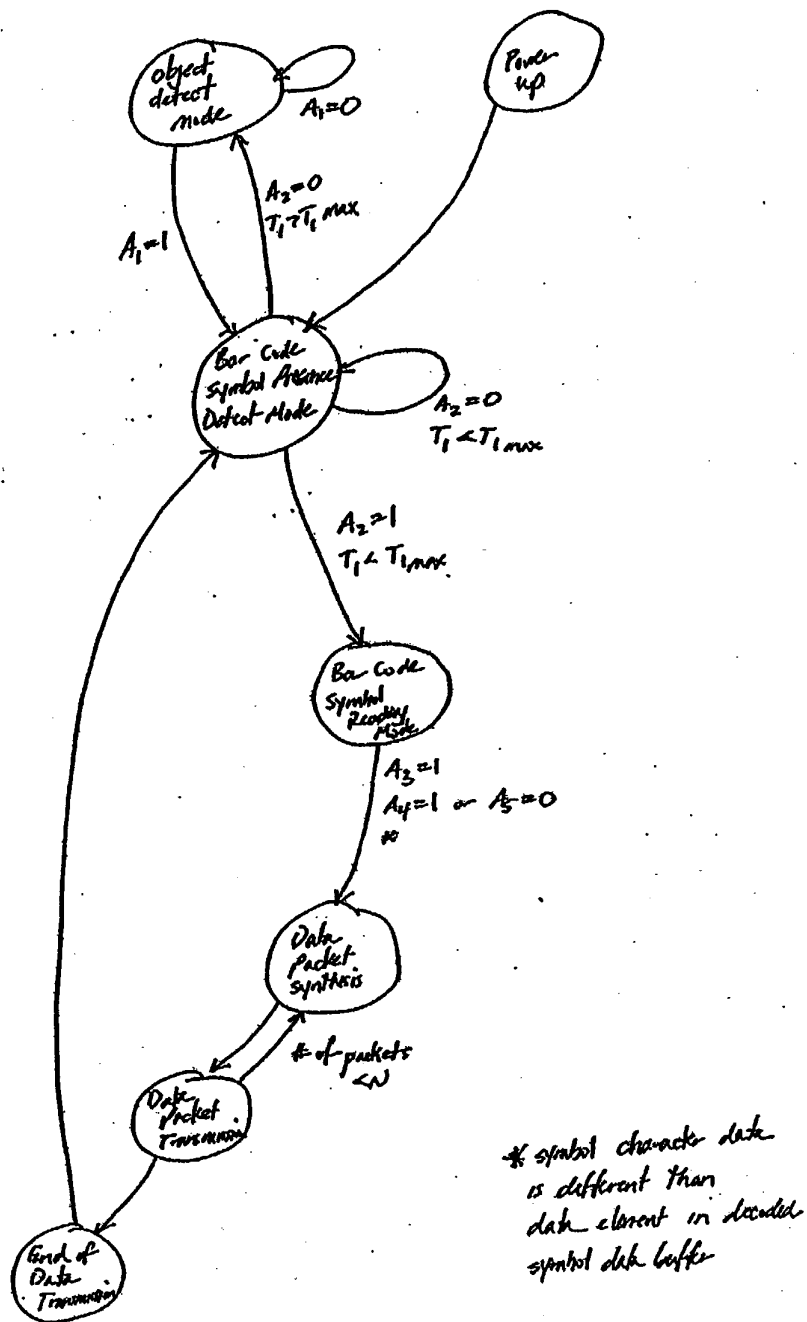
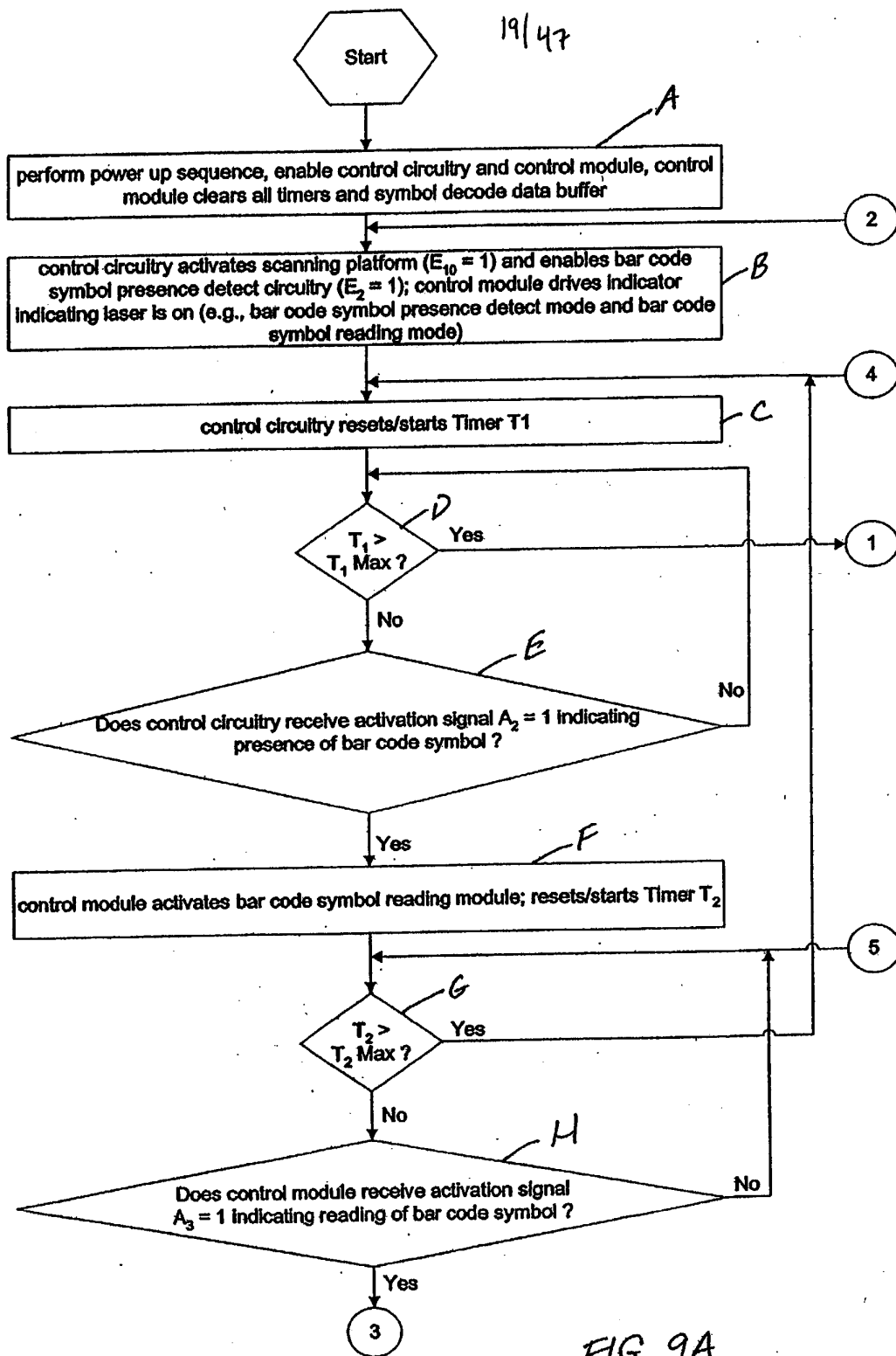


FIG. 8



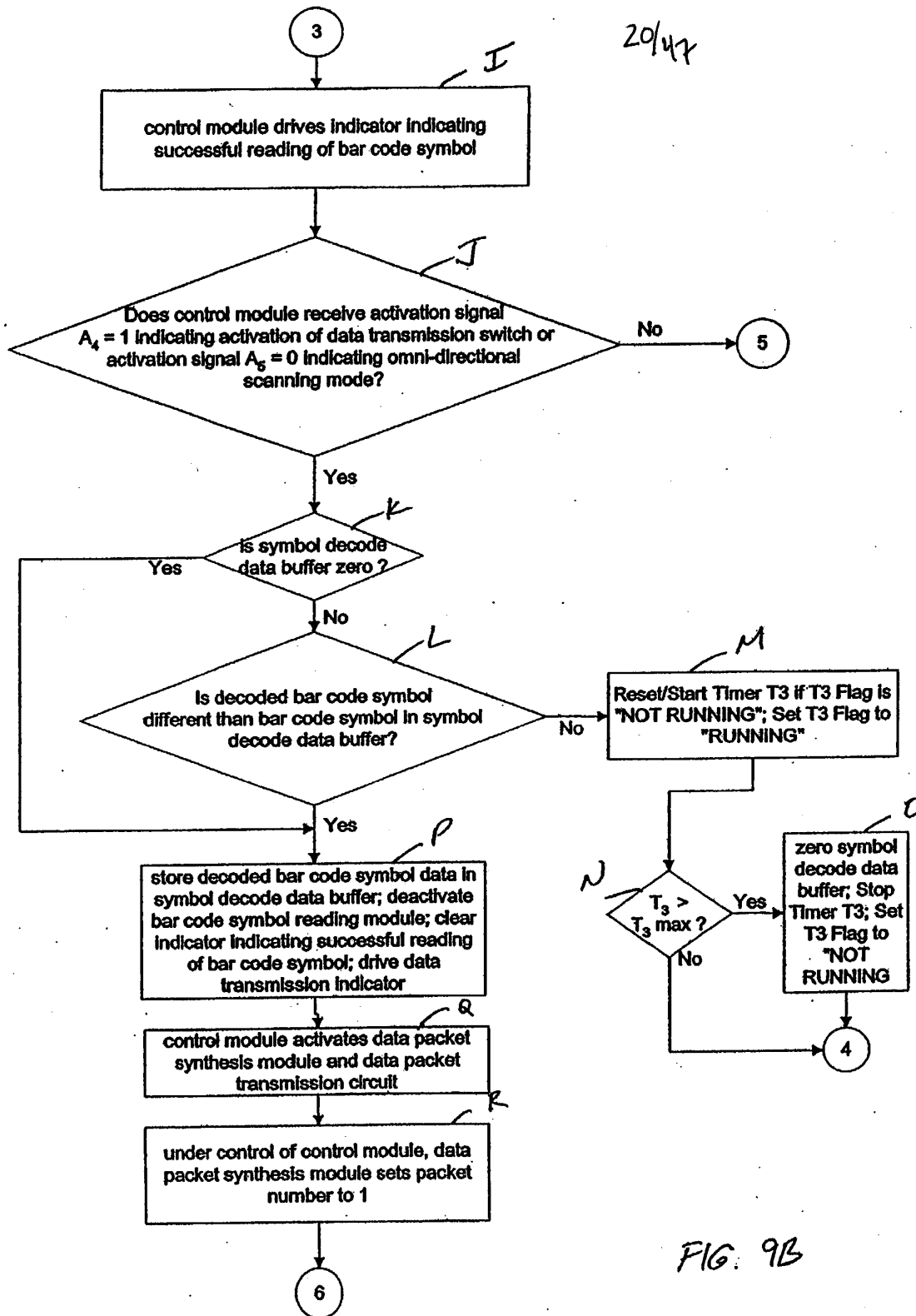


FIG. 9B

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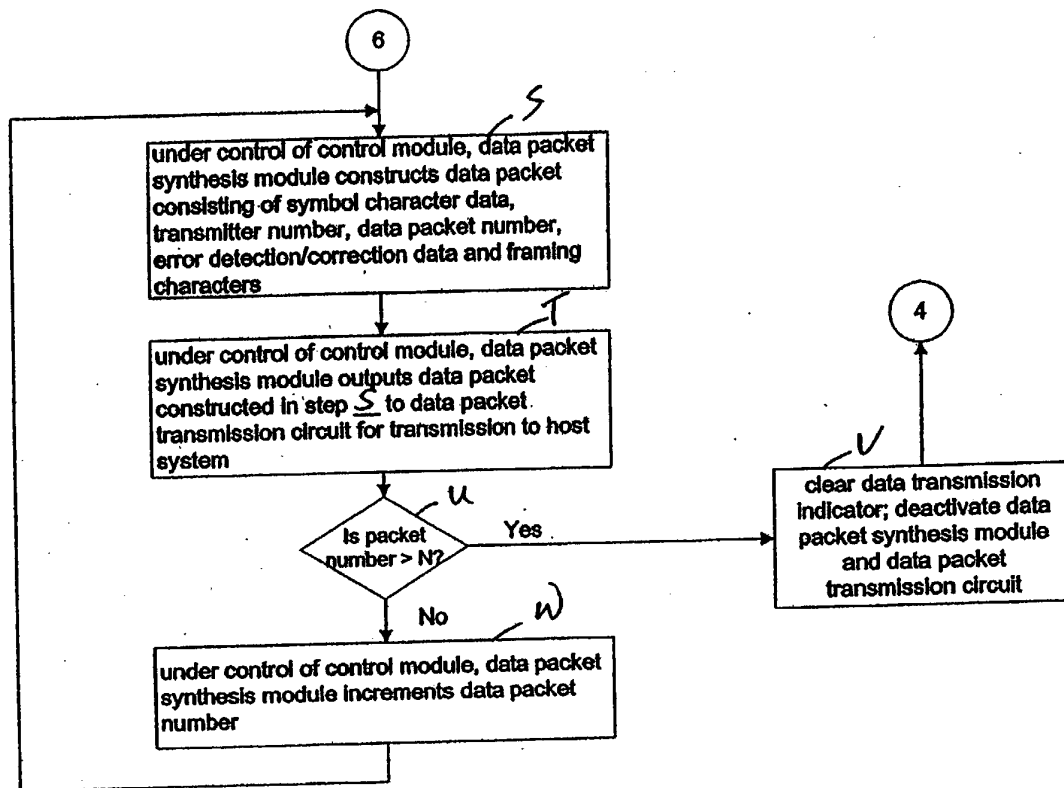


FIG. 9C

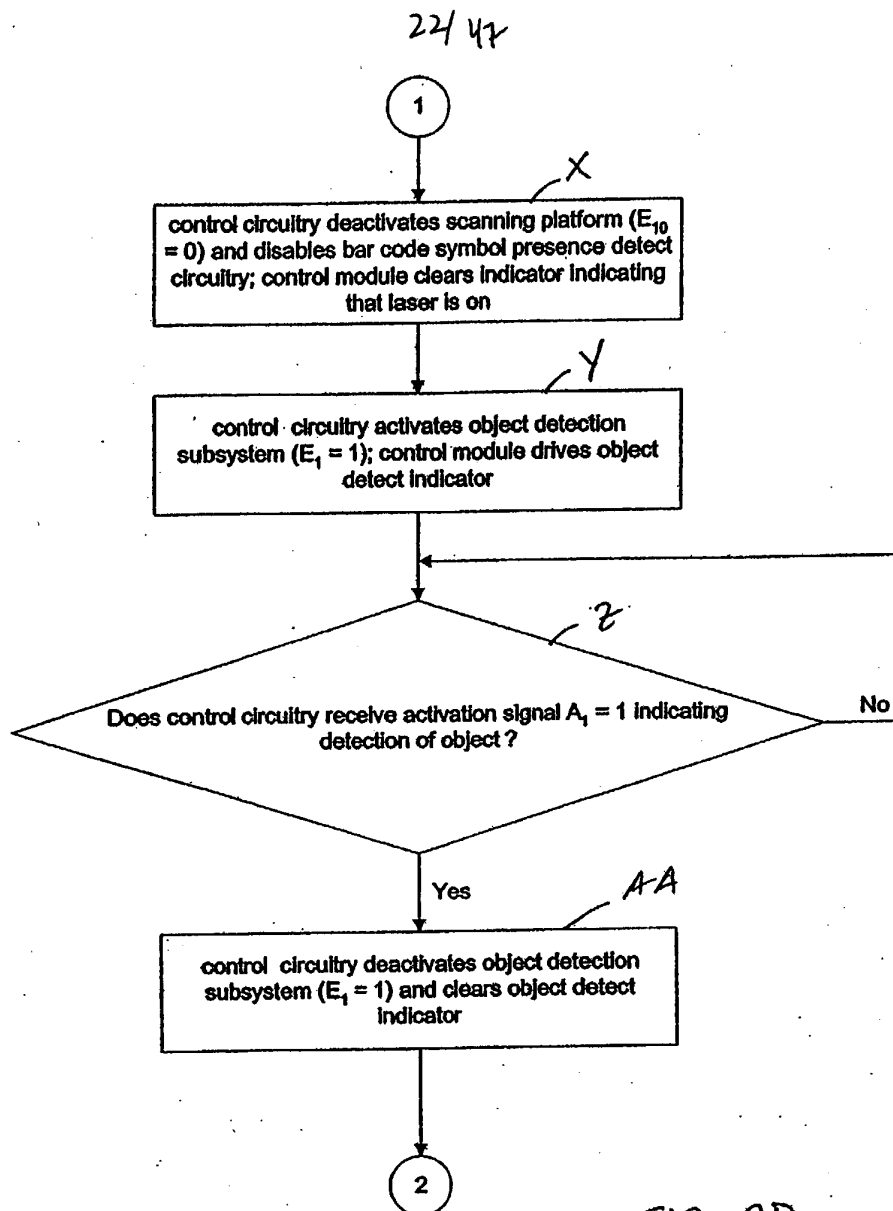


FIG. 9D

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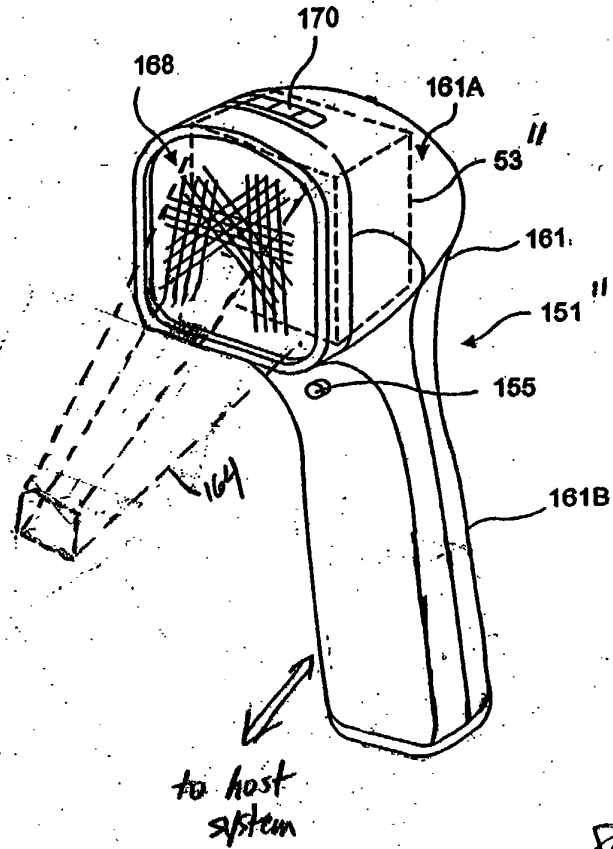


FIG. 10A

Second
Generalized
Embodiment

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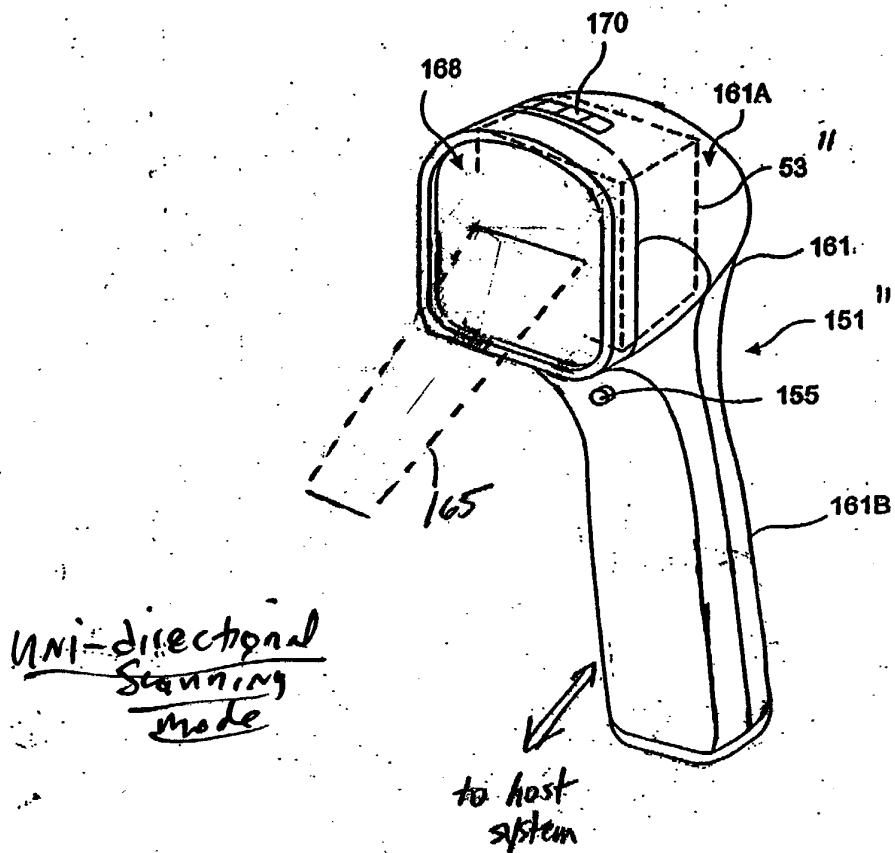


FIG. 10B

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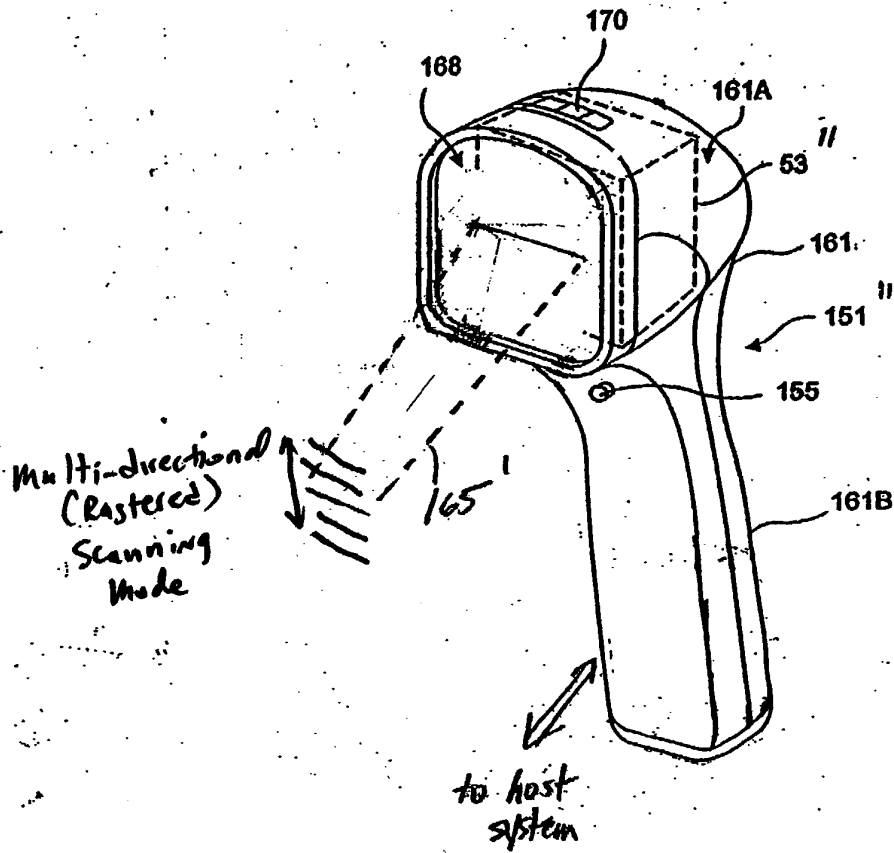


FIG. 10C

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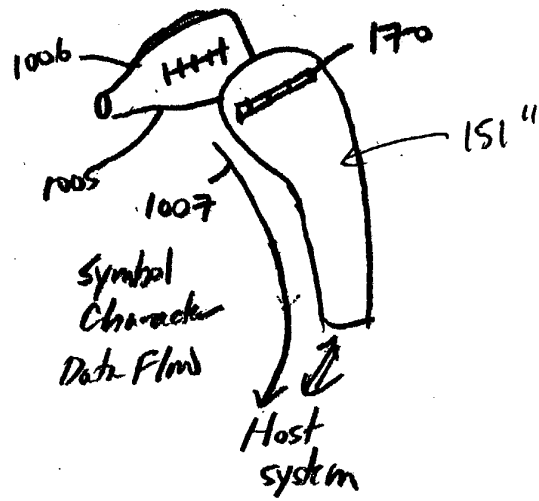
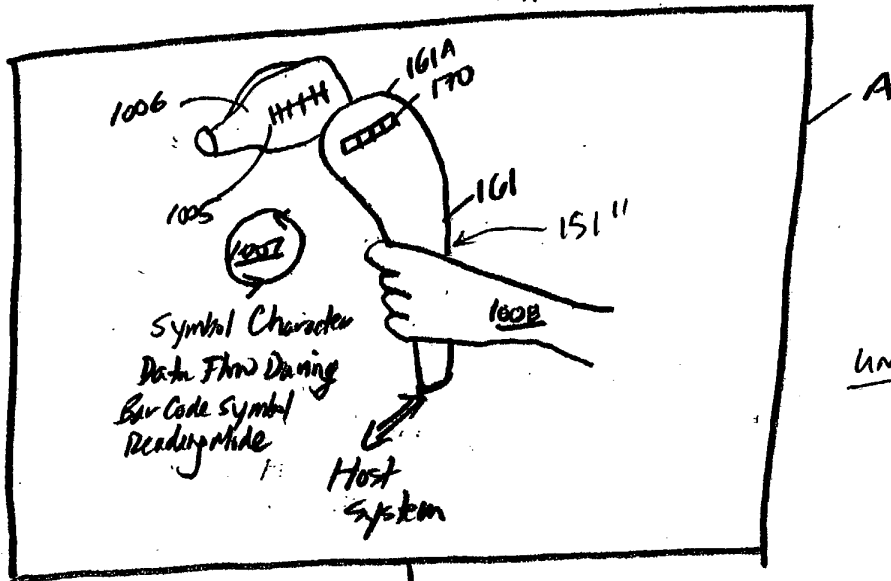


FIG. 11A

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Uni-directional
and
Multi-directional
Modes

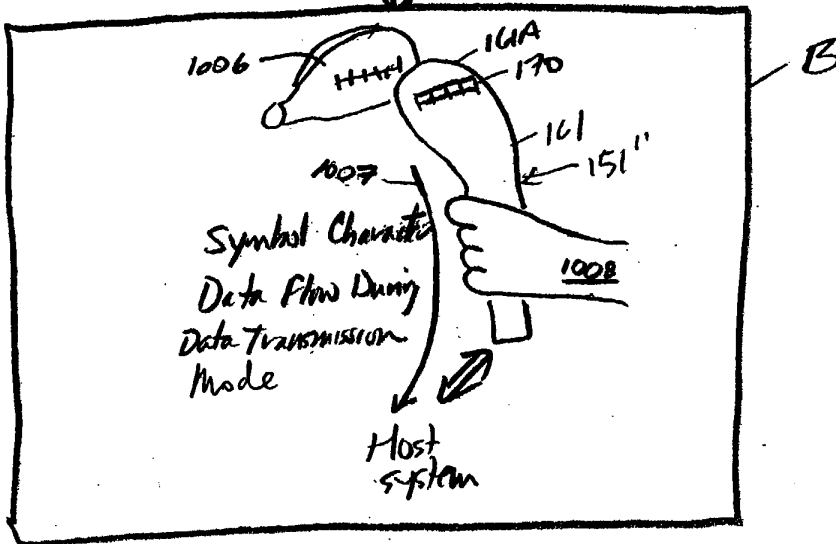


FIG. 11B

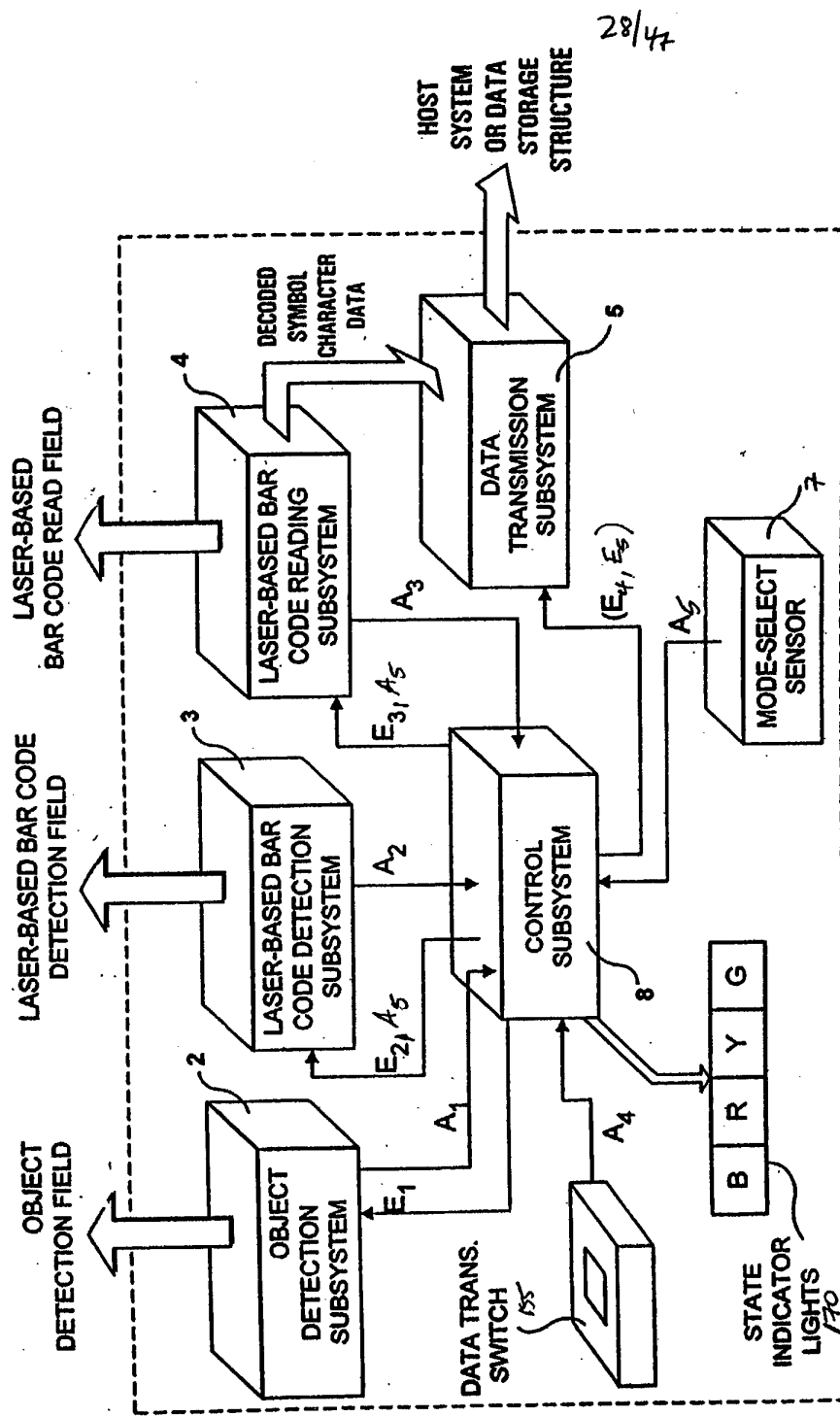


FIG. 12

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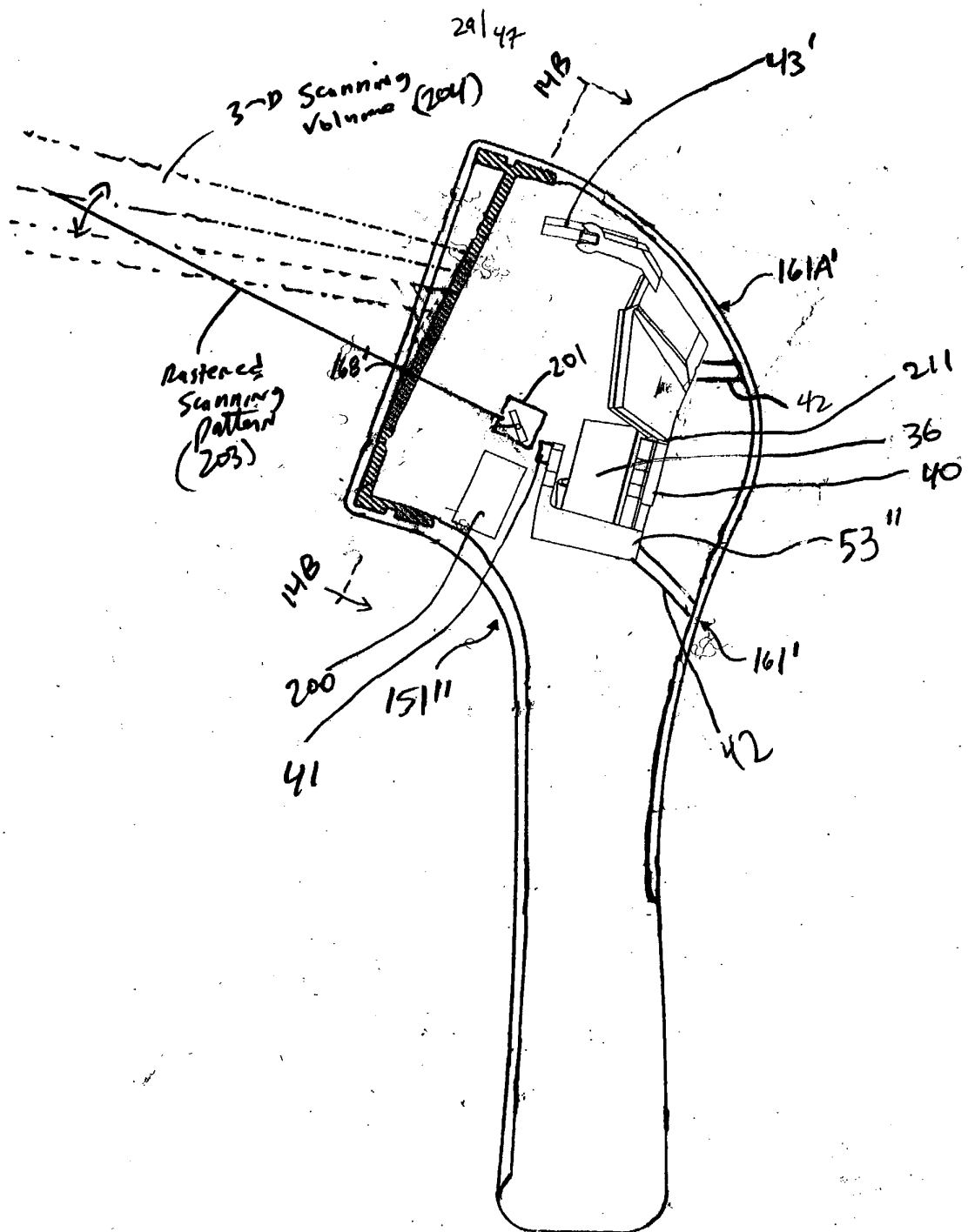
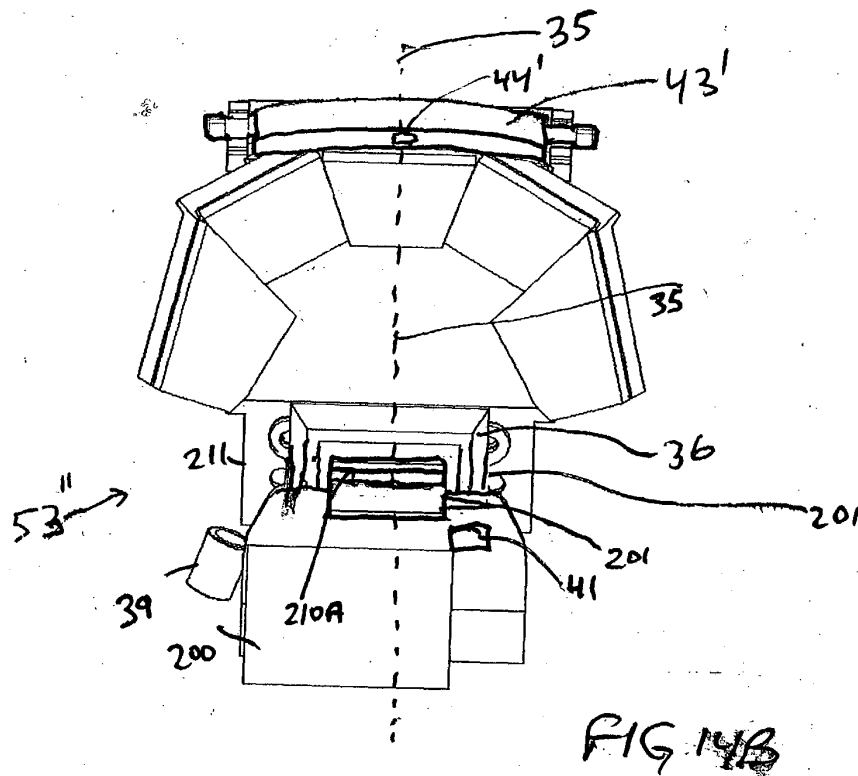
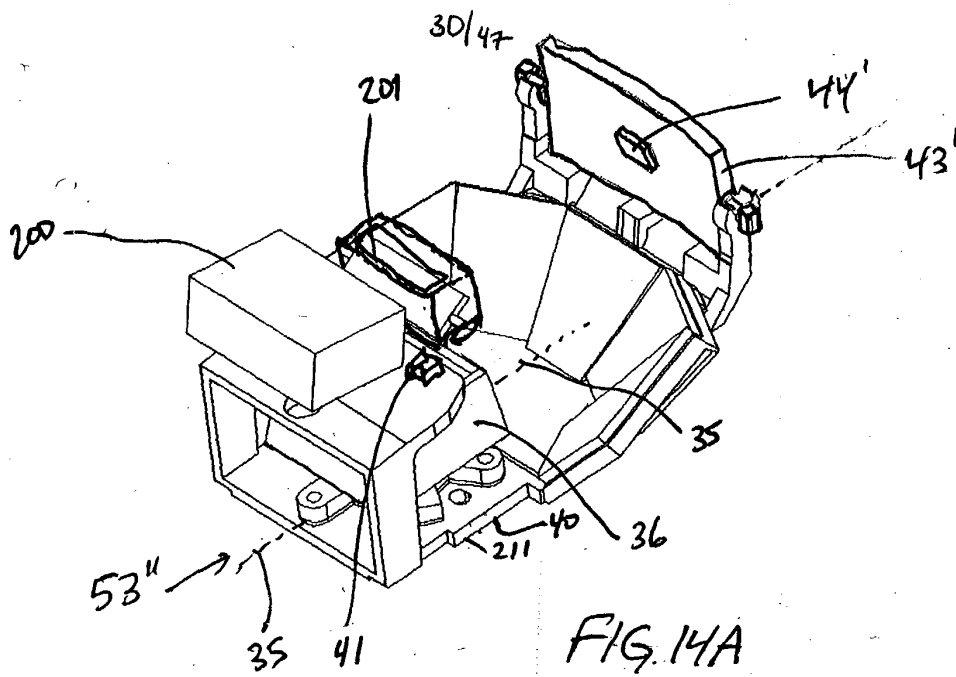
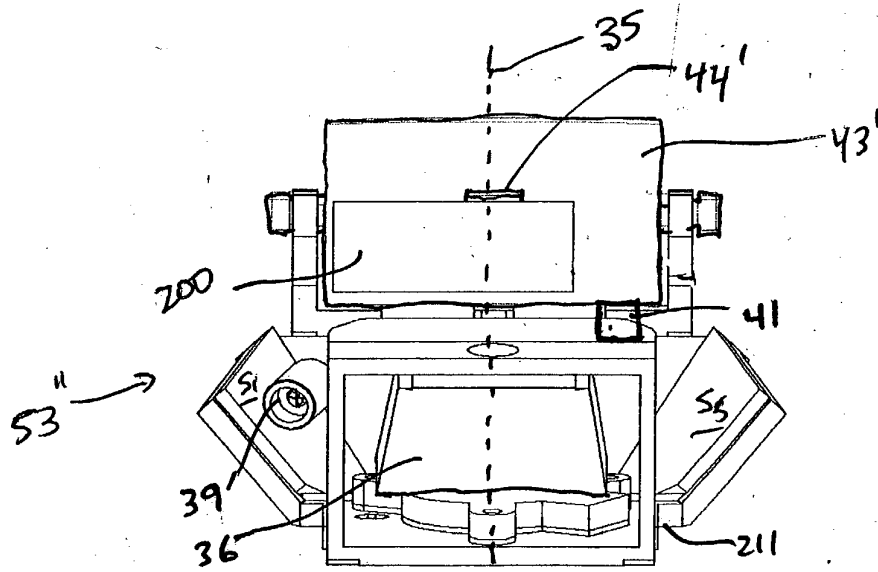
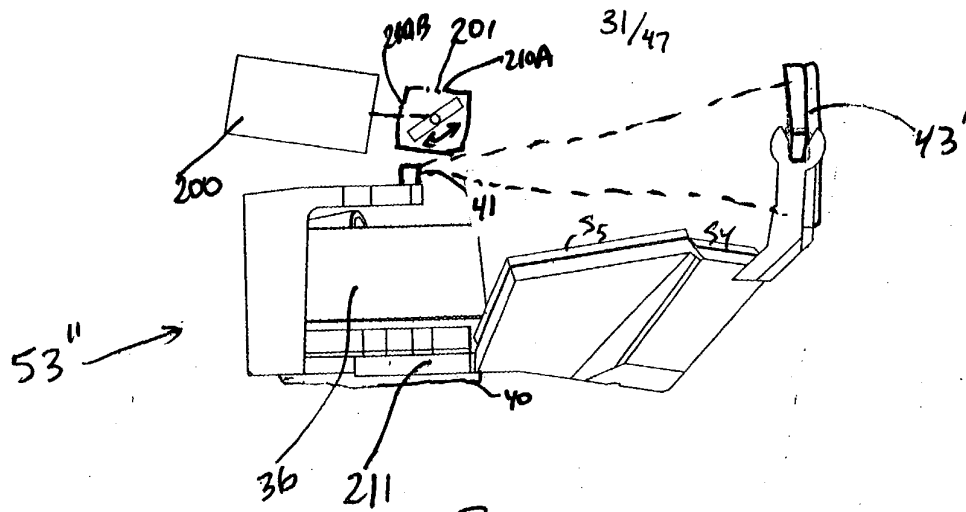


FIG. 13





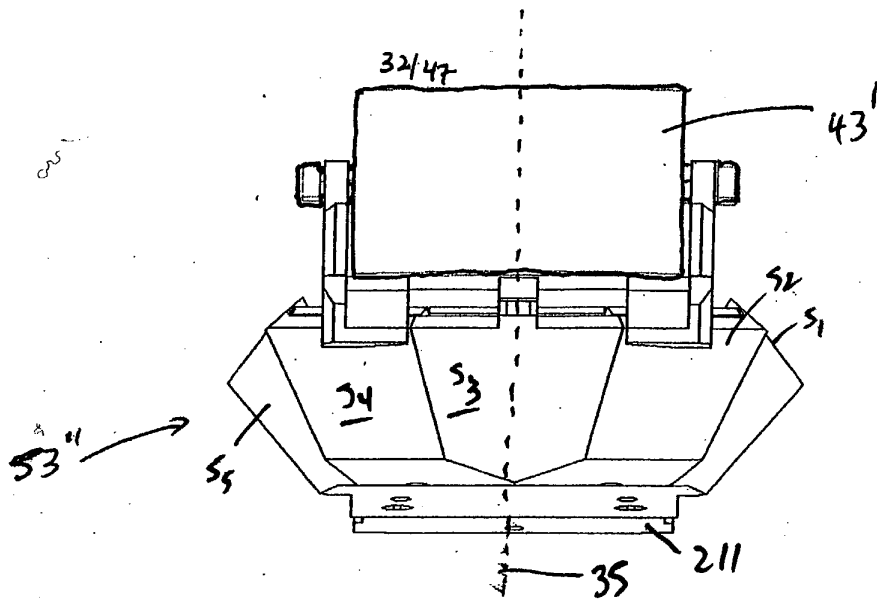


FIG. 14E

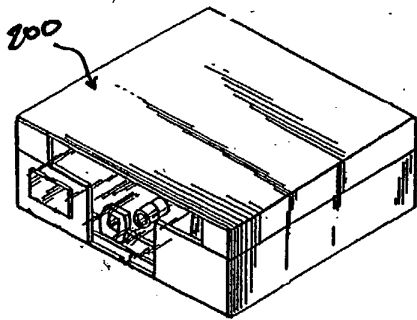


FIG. 14F

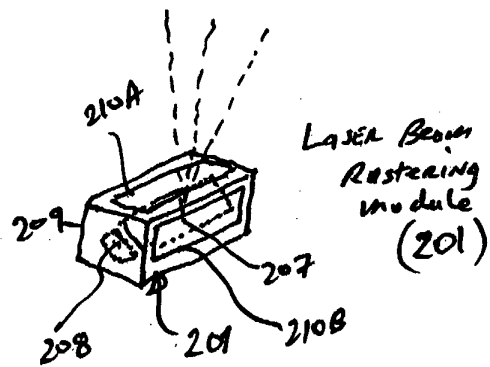


FIG. 14G

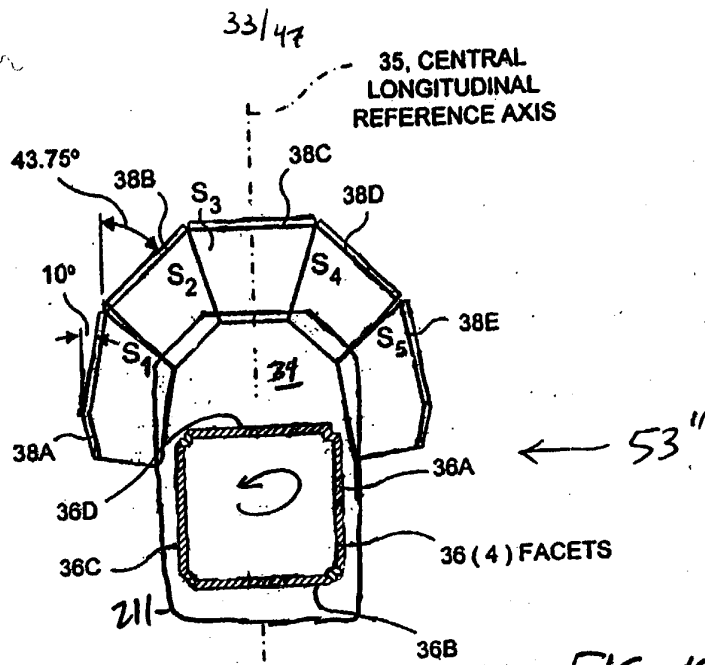


FIG. 15A

Optics Bench Array Mirror
Specifications

Mirror	Relief Angle	Twist Angle
	Degrees	
1	45.91	69.32
2	47.85	34.15
3	48.4	0
4	47.85	34.15
5	45.91	69.32

Mirror	Length	Width
	Millimeters	
1	19.872	17.303
2	16.341	13.746
3	16.67	15.788
4	16.341	13.746
5	19.872	17.303

FIG. 15B

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Angles specification:

Definitions:

Relief Angle - The angle between the plane including all the bottom front edges of the array mirrors and the front surface of the mirror being measured.

Twist Angle - The angle of rotation about the z-axis with 0 degrees twist being defined as perpendicular to the incident beam (field 3).

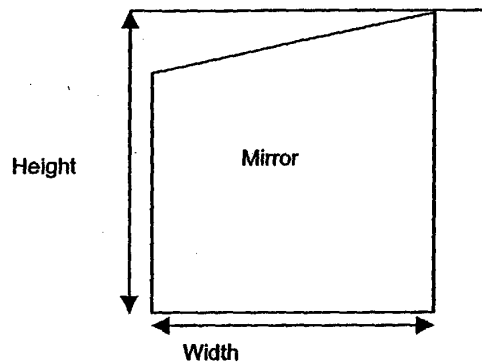


FIG. 15C

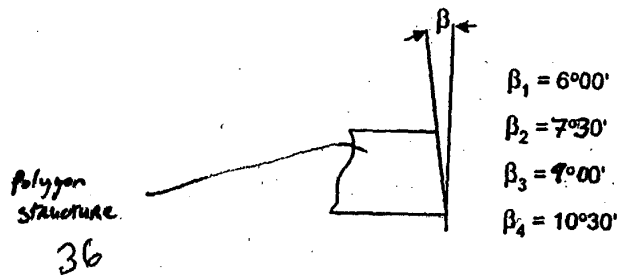
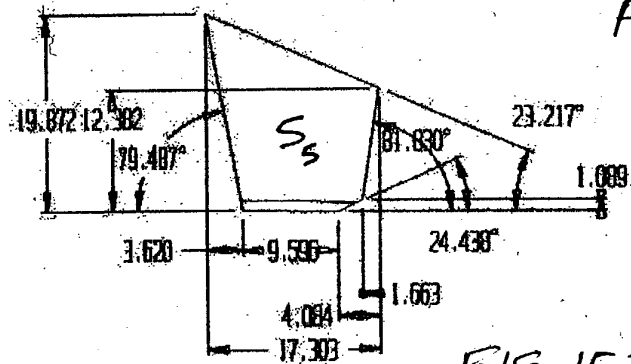
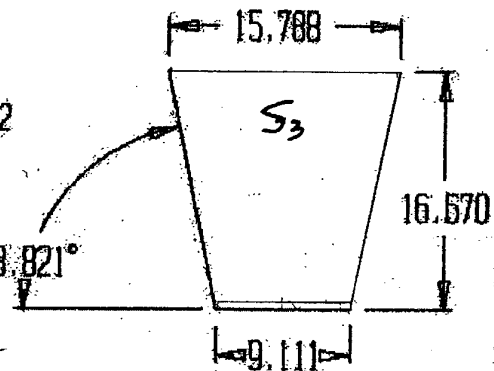
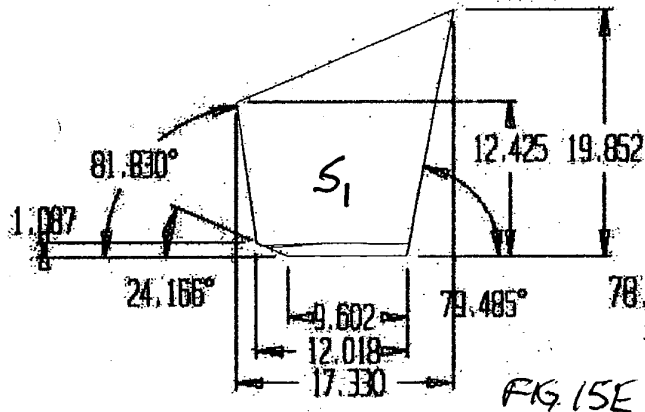
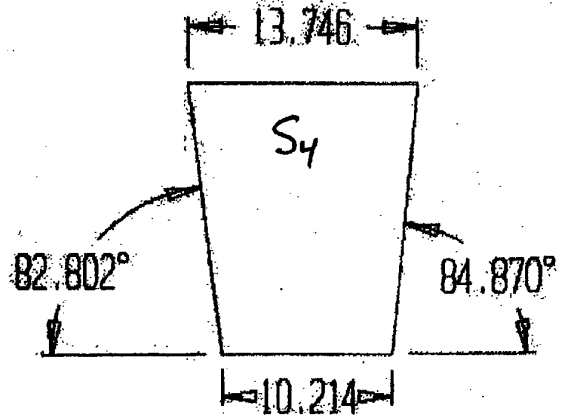
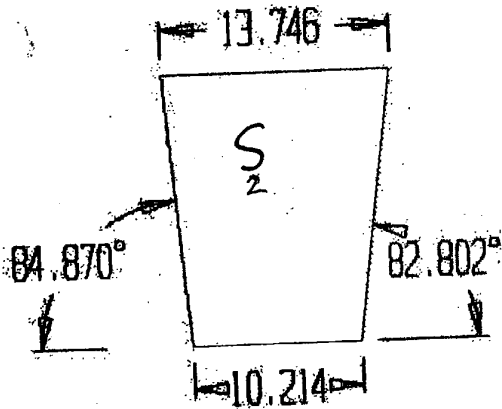


FIG. 15D

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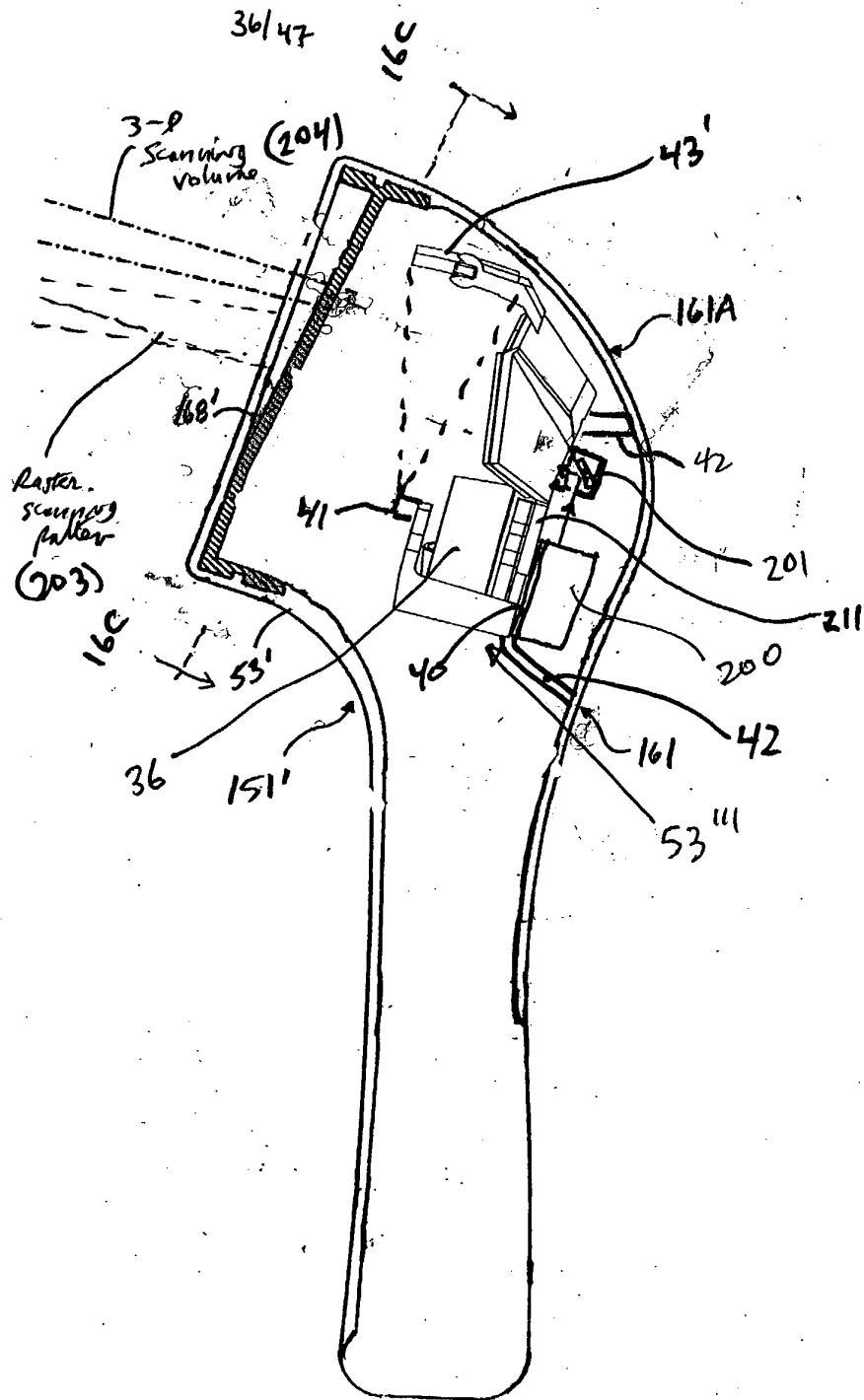
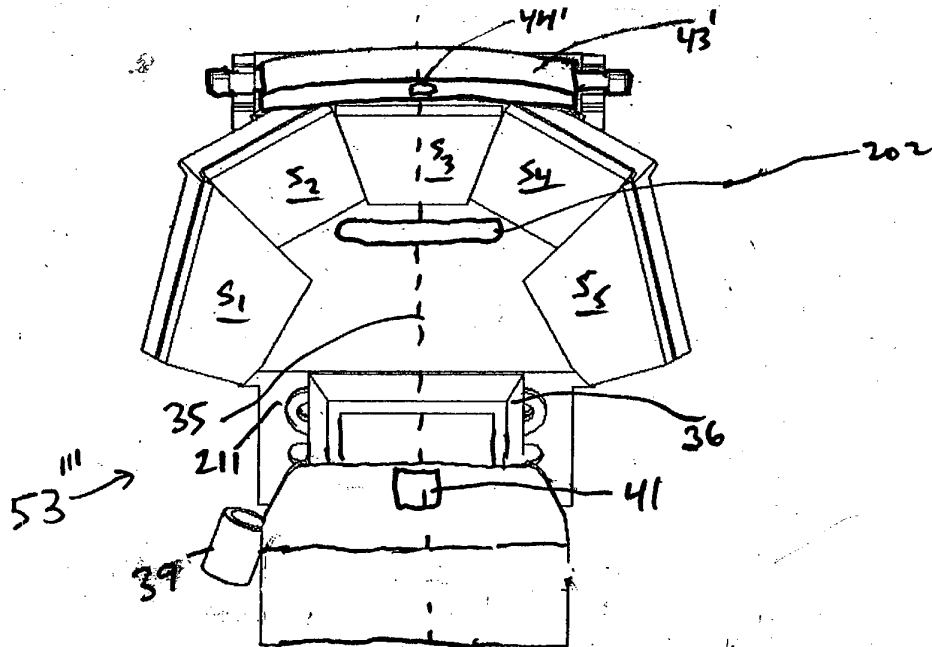
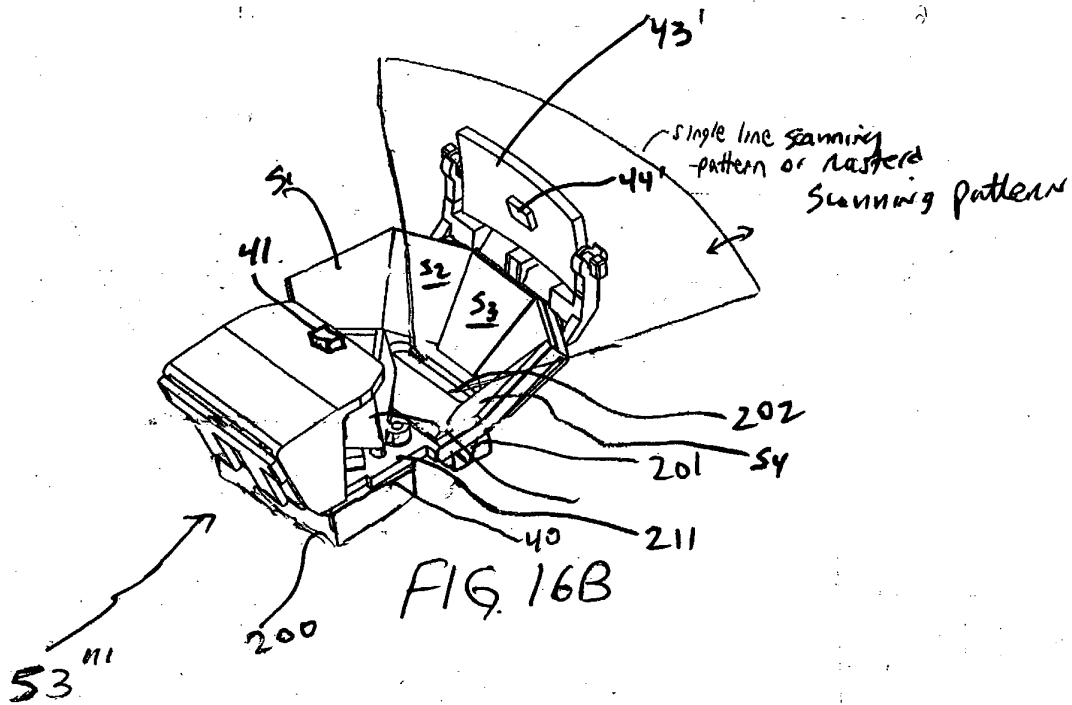
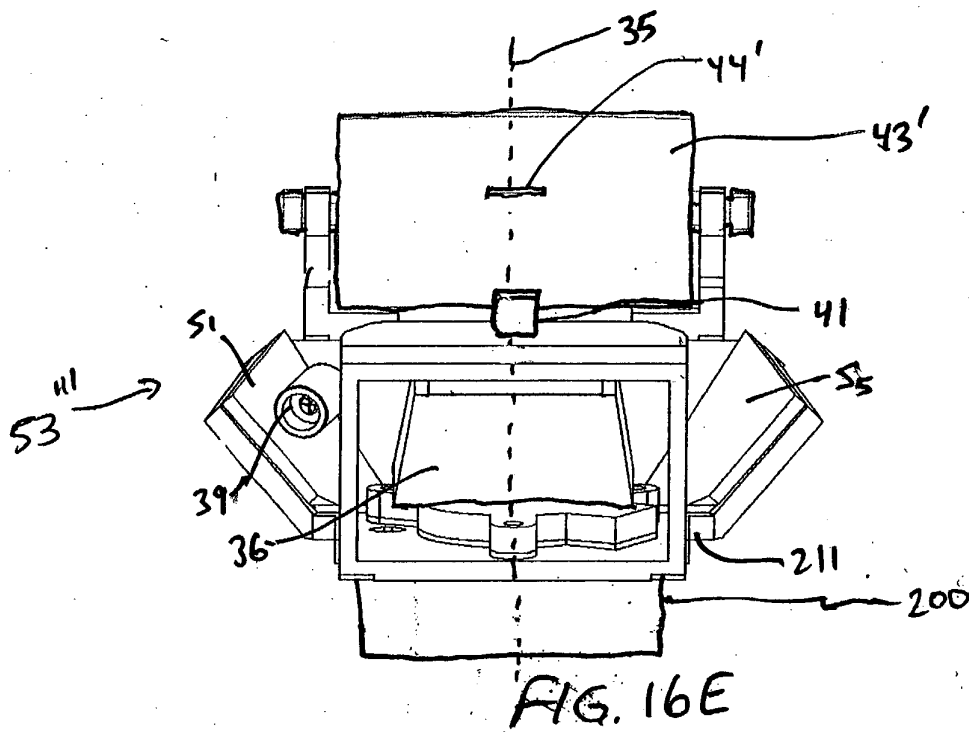
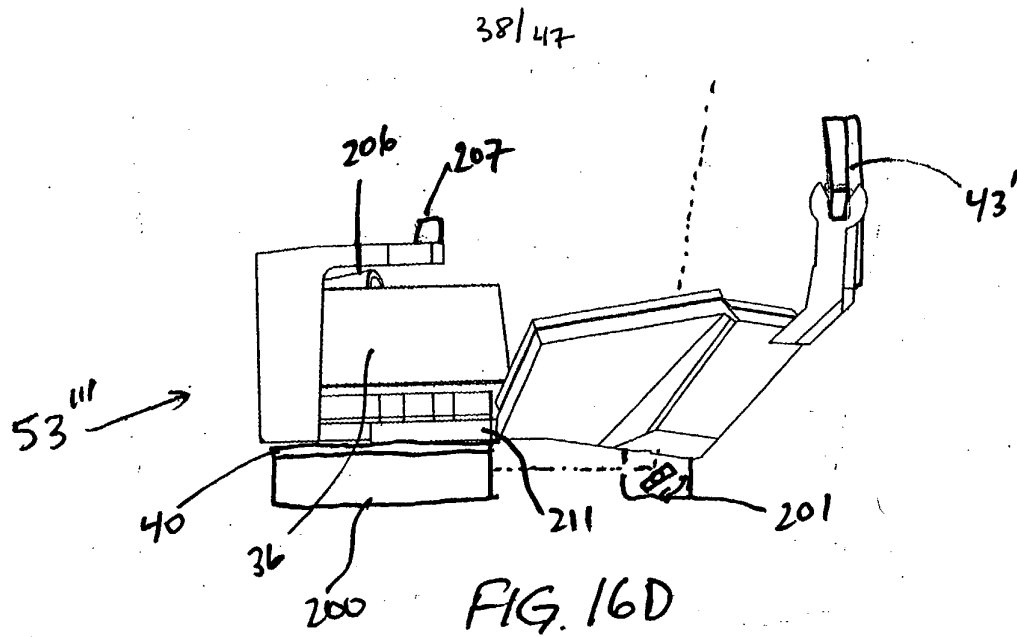


FIG. 16A

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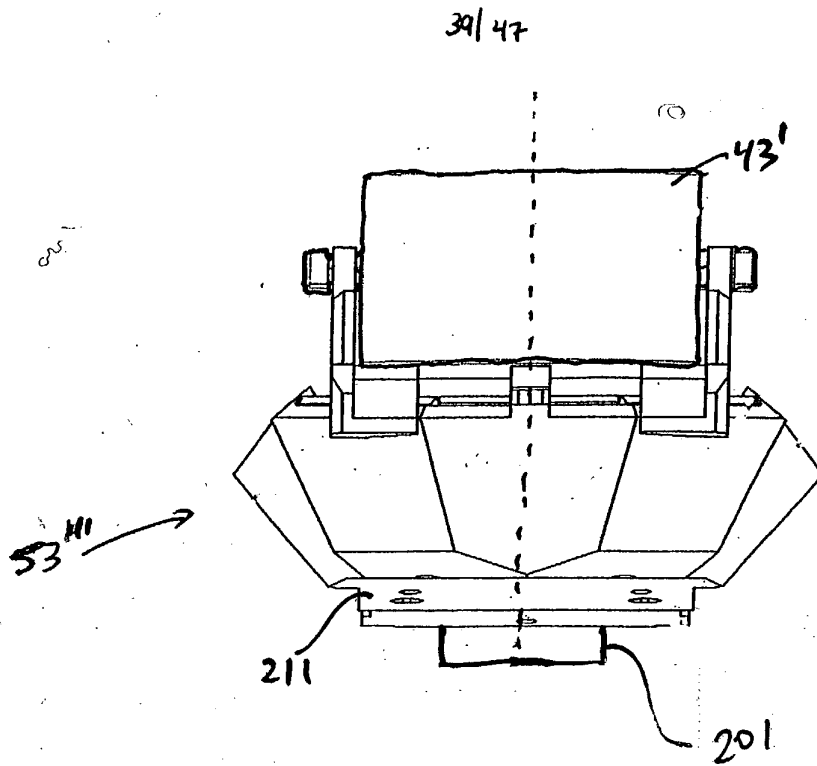


FIG. 16F

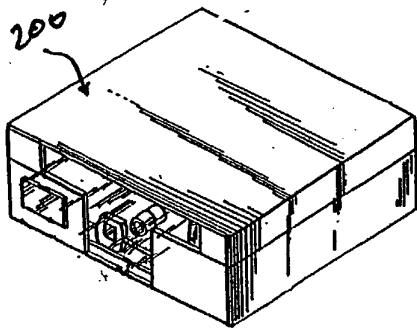


FIG. 16G

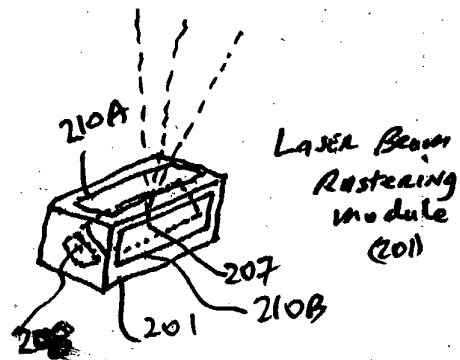


FIG. 16H

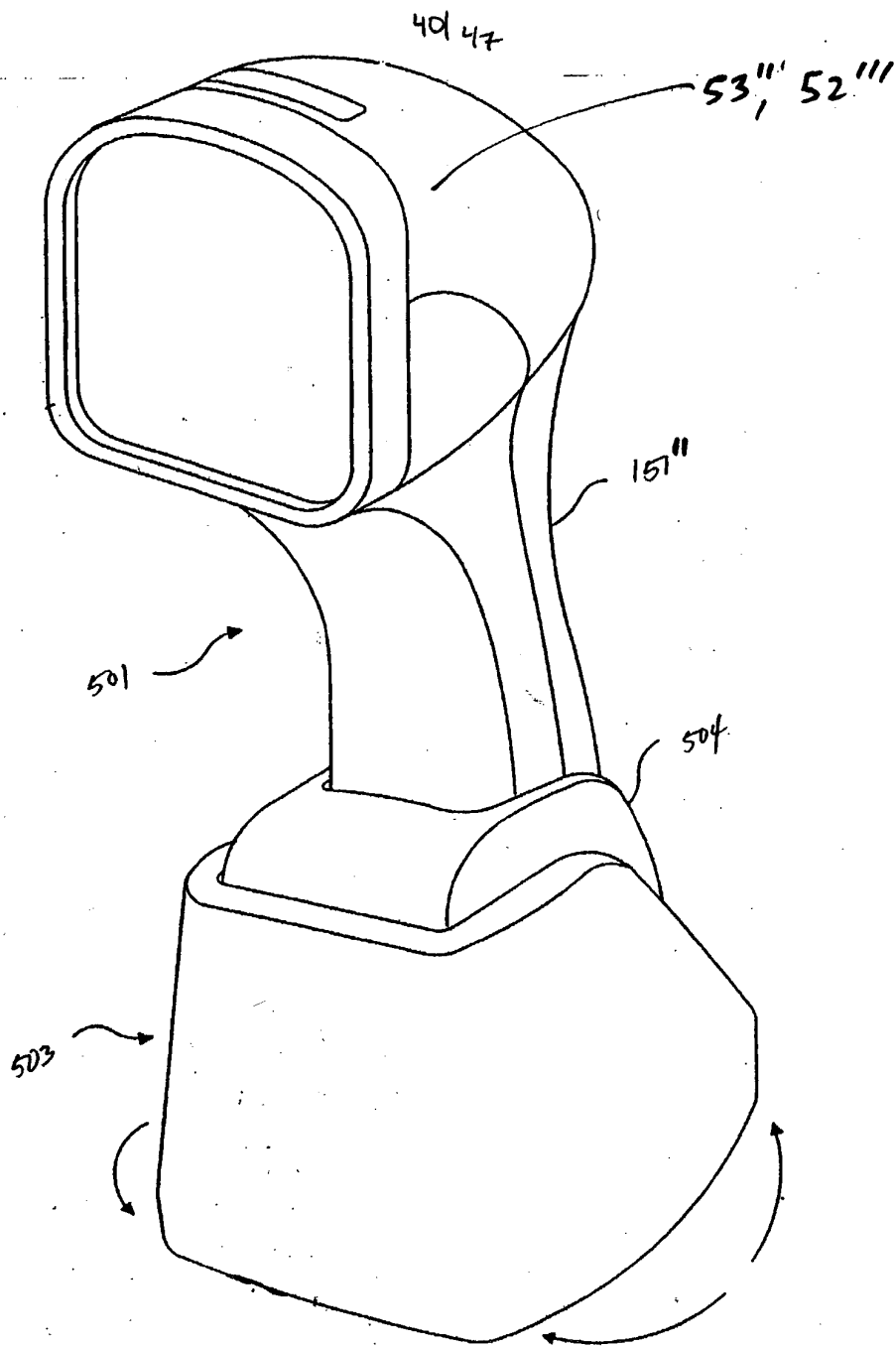
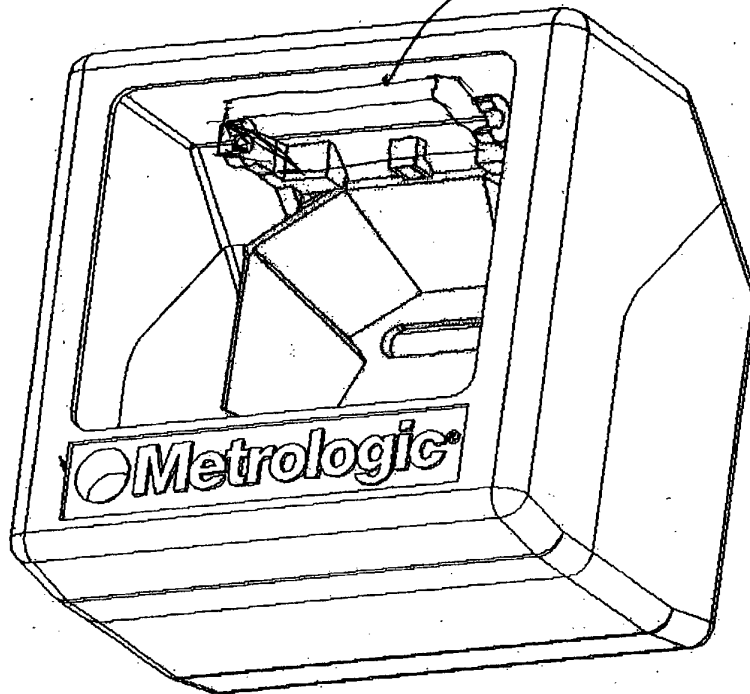


FIG. 17

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53", 53"



Device has
omni-directional
multi-directional
and uni-directional
scanning modes of
operation

FIG. 18

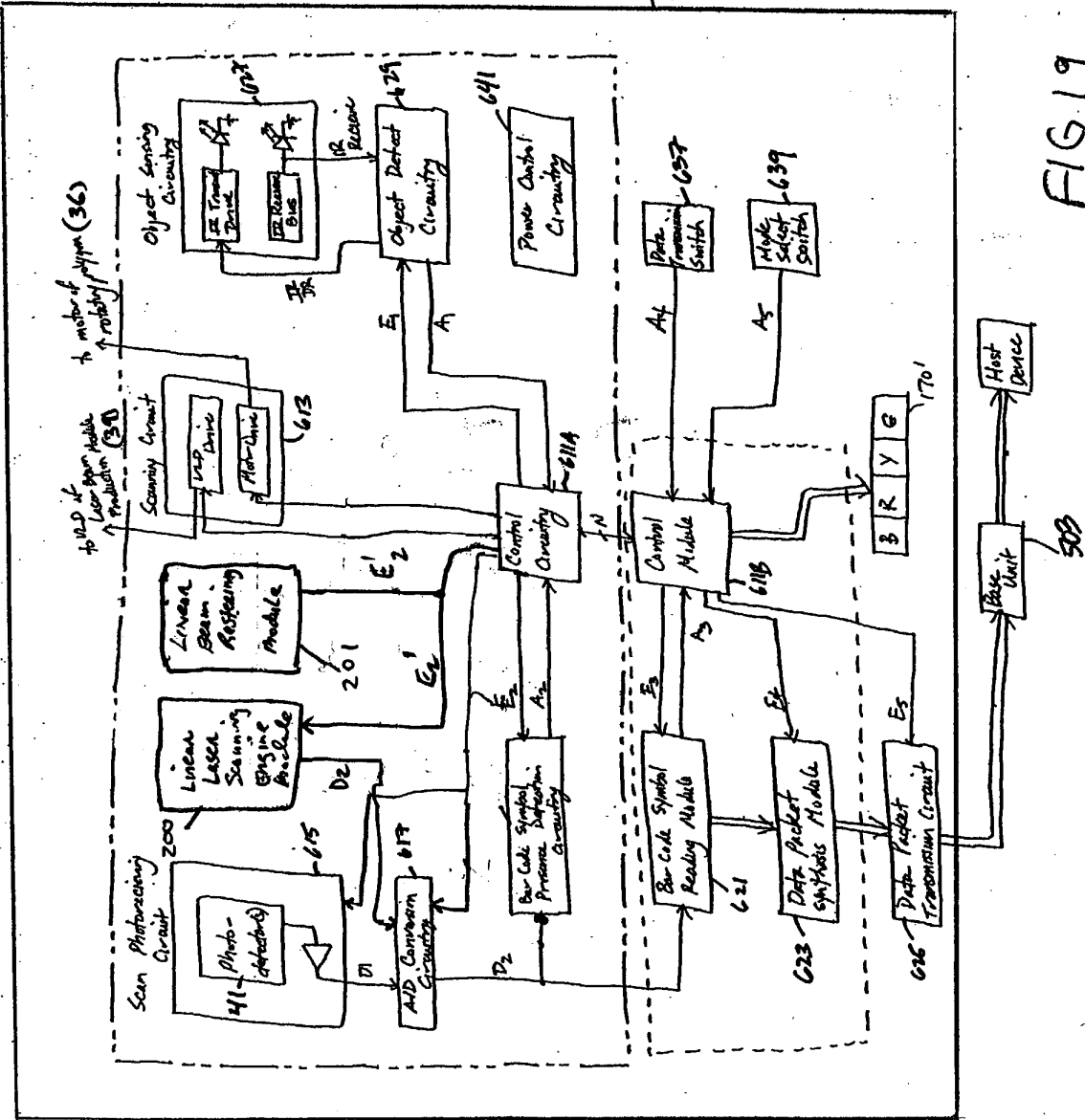


FIG 19

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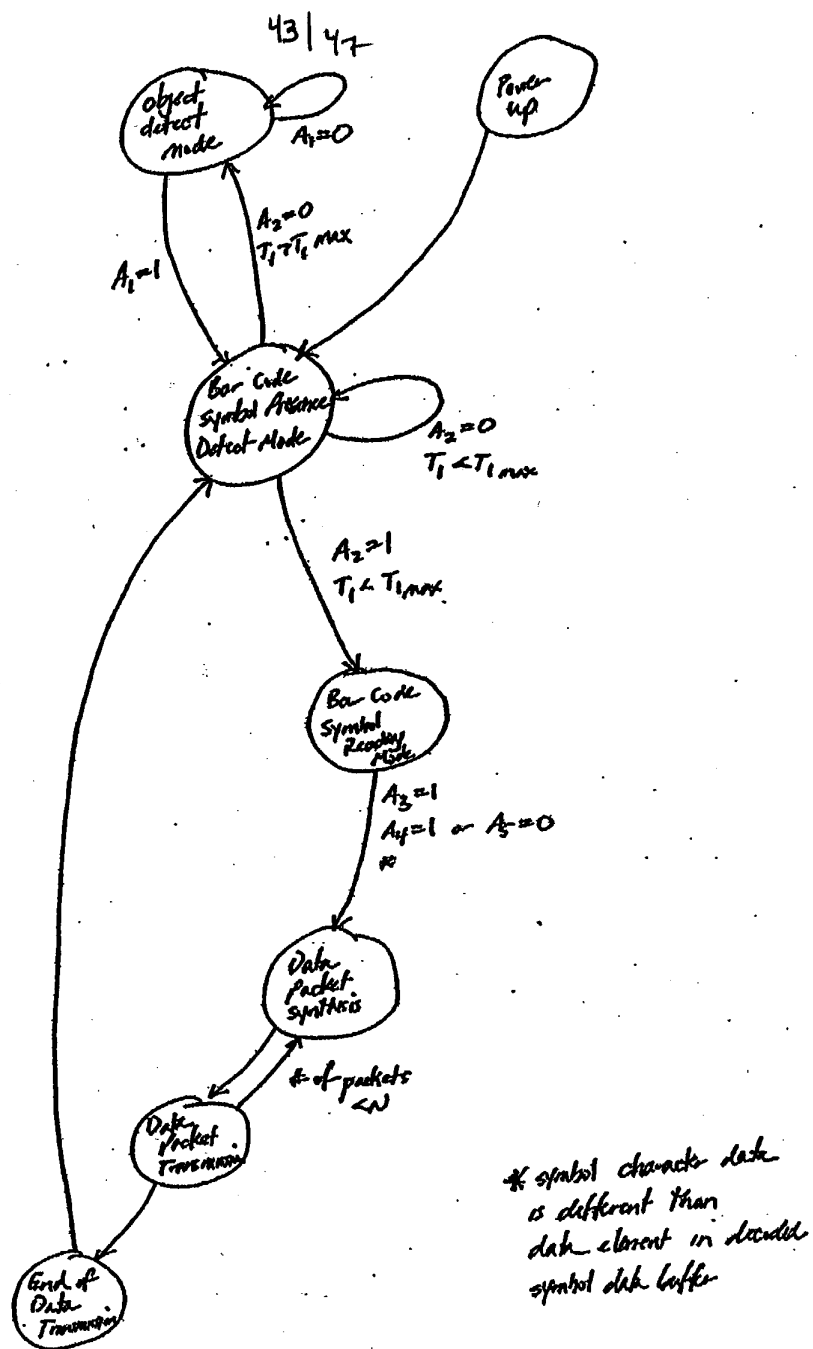


FIG 20

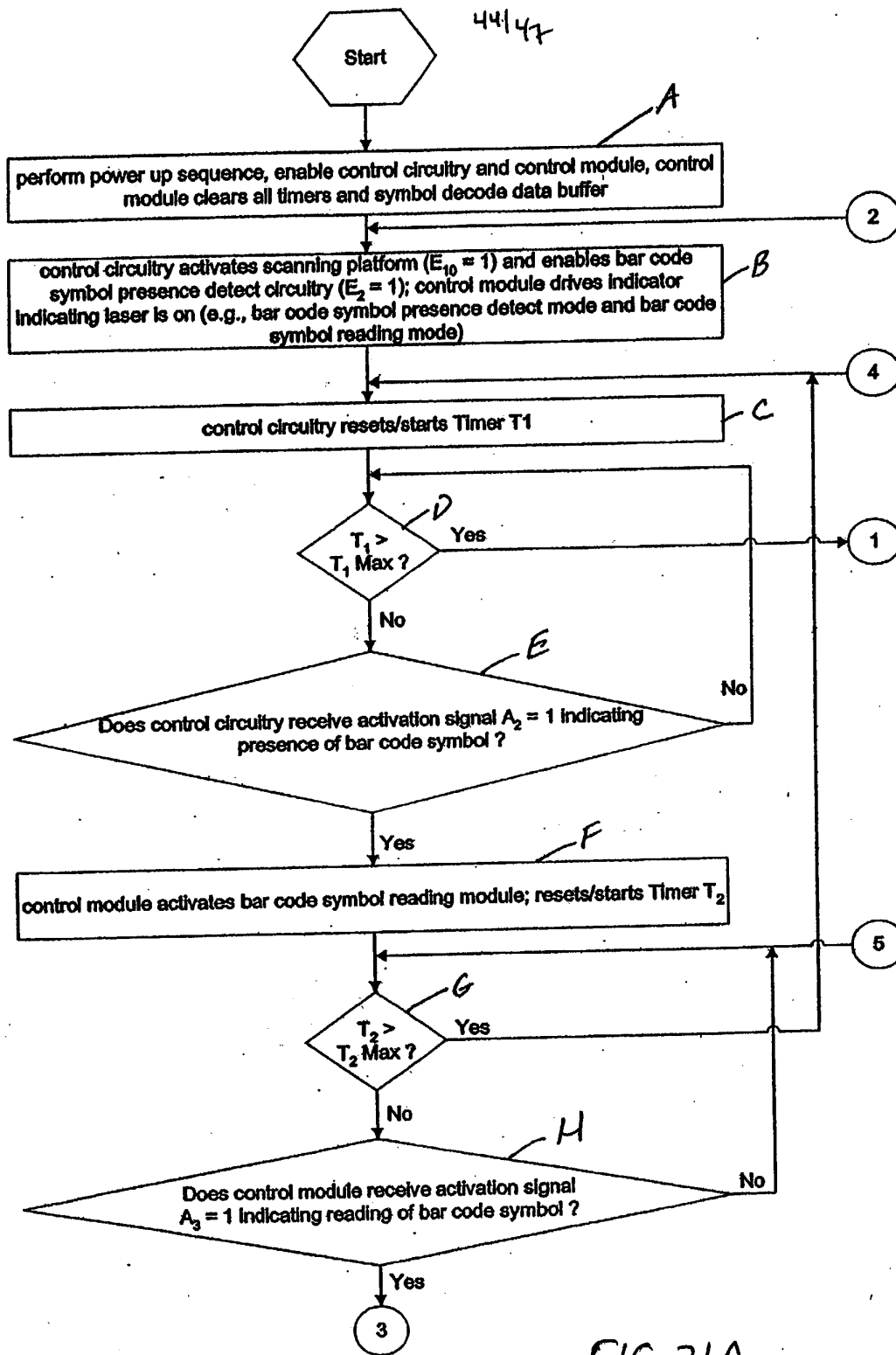


FIG 21A

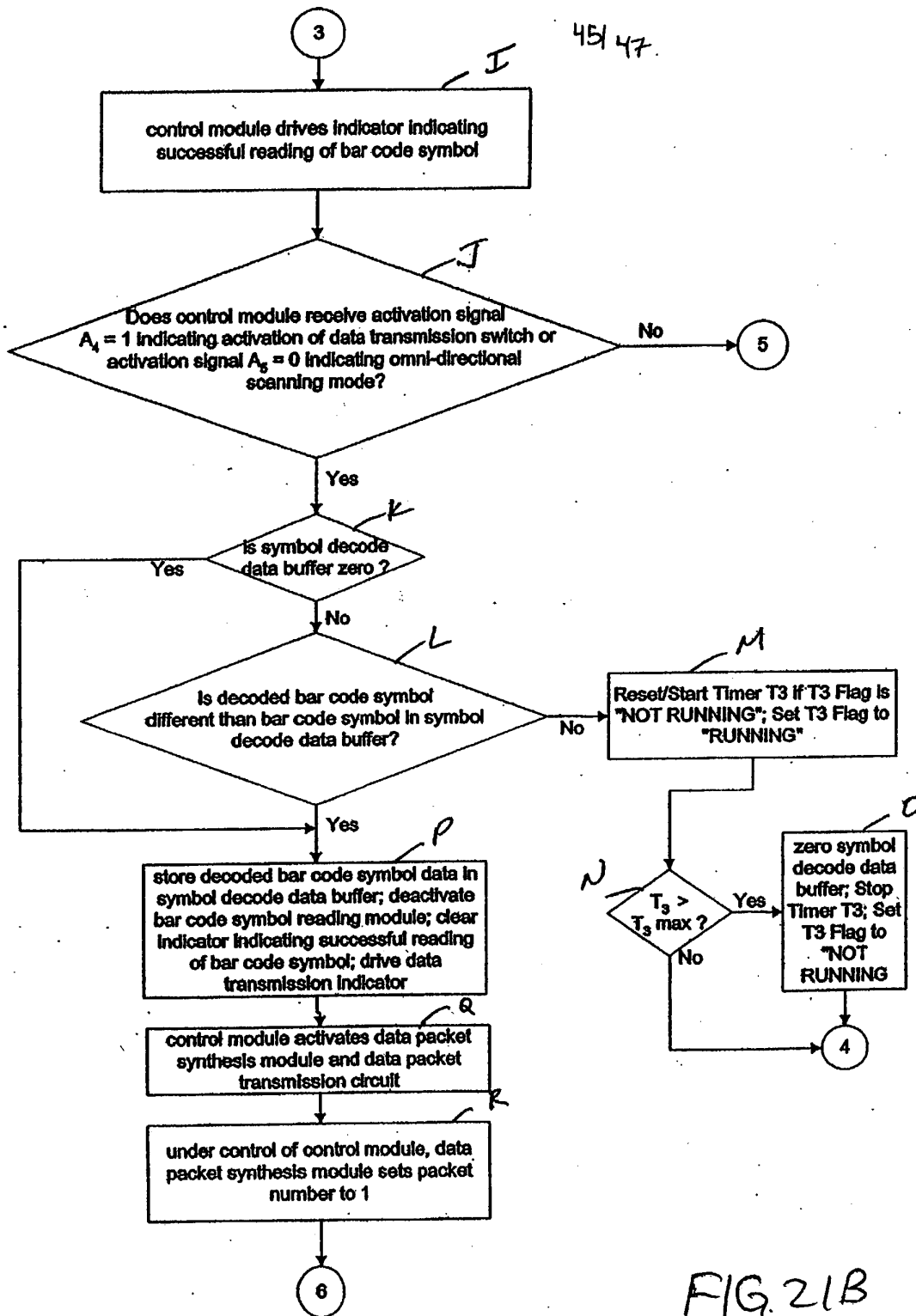


FIG. 21B

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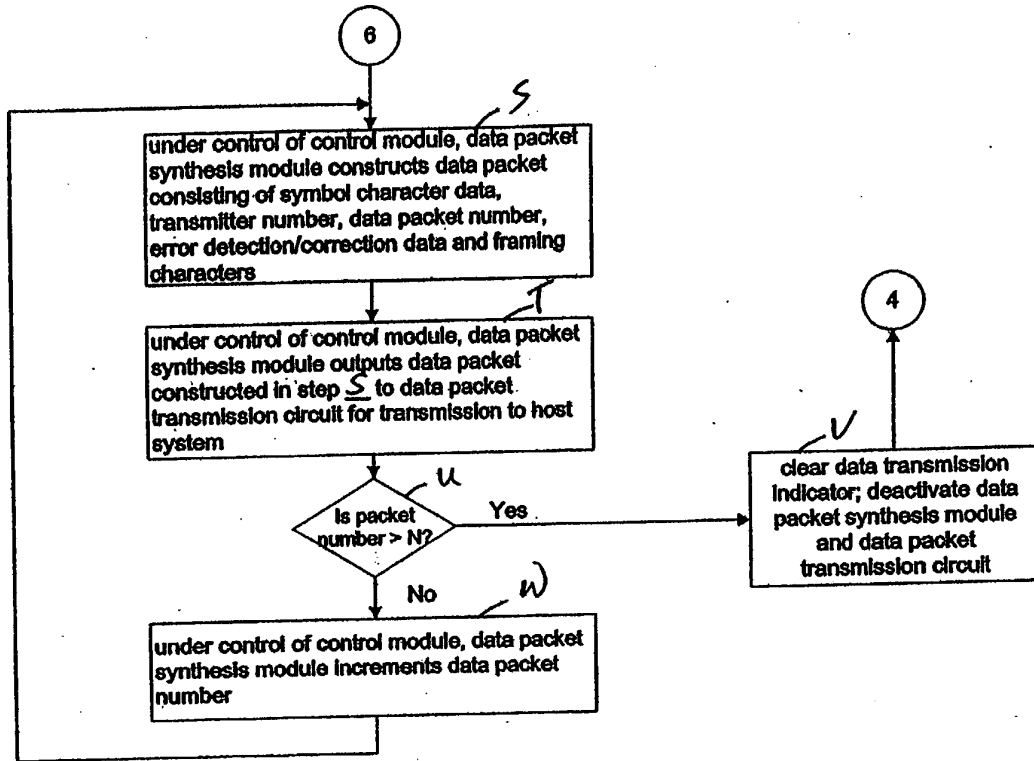


FIG. 21C

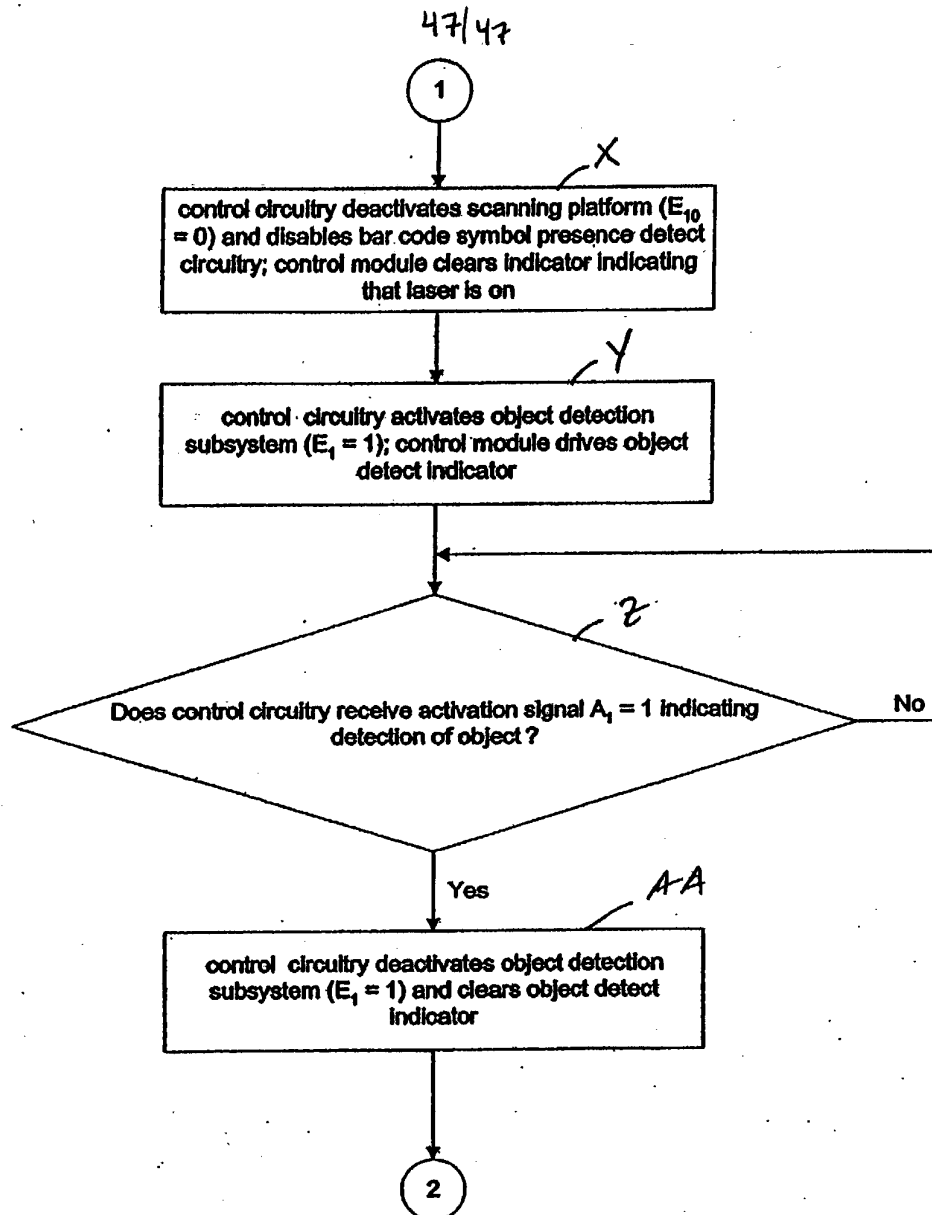


FIG. 21D